SUPREME AUDIT INSTITUTION OF INDIA
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Report of the Comptroller and Auditor General of India on Functioning of Delhi Transport Corporation for the year ended 31 March 2022

Government of National Capital Territory of Delhi

Report No. 4 of 2024

(Performance Audit - Commercial)

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Comptroller and Auditor General of India
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Table of Contents

Chapter No.	Description	Page No.
Preface		iii
Executive Summary		v
1	Introduction	1
2	Planning and Financial Management	5
3	Operational Performance	25
4	Procurement of Buses and Implementation of Intelligent Transport System	41
5	Human Resource Management	53
6	Other Issues	59
7	Internal Control Mechanism	63

Annexures

Number	Particulars	Reference to	
		Paragraph	Page No.
2.1	Financial Position of the Corporation during last seven years ended on 31 March 2022	2.2.1 and 2.2.3	69
2.2	Working results of the Corporation for last seven years ended on 31 March 2022	2.2.1 and 2.2.2	70
3.1	Operational performance of the Corporation for the period of seven years ended on 31 March 2022	3.1	72
3.2	Age- profile of the buses held by the Corporation for the last eight years ended on 31 March 2023	3.2.1 and 3.2.2	73
3.3	Statement showing Vehicle productivity of the Corporation, MTC, BMTC and Cluster buses	3.2.3	74
3.4	Statement showing Load factor of the Corporation and Cluster buses	3.2.4	74
3.5	Statement showing the missed Scheduled kms	3.2.6	75
3.6	Statement showing actual consumption of CNG, mileage obtained per kilogram of CNG and extra expenditure on CNG consumption	3.2.8	76

Number	Particulars	Reference to	
		Paragraph	Page No.
4.1	Statement showing proposals made for procurement of buses since 2013 but could not finalised to tender stage	4.1	77
5.1	Statement showing Manpower position during the seven years period ended on 31 March 2022	5.3	78

PREFACE

This Report of the Comptroller and Auditor General of India has been prepared for submission to the Lieutenant Governor of National Capital Territory of Delhi under Section 48 of the Government of National Capital Territory of Delhi Act, 1991 for being laid before the Legislative Assembly of the National Capital Territory of Delhi.

Delhi Transport Corporation was established as a Statutory Corporation in 1971 under the Road Transport Corporation Act, 1950 as amended by Delhi Road Transport Laws (Amendment) Act 1971, to provide an efficient, economical and properly coordinated road transport service in Delhi.

The Report contains results of the Performance Audit on "Functioning of Delhi Transport Corporation" covering the period 2015-16 to 2021-22.

The instances mentioned in this Report are those which came to notice in the course of test audit for the period 2015-16 to 2021-22; but could not be reported in the previous Audit Reports; any development subsequent to the year 2021-22 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Executive Summary

EXECUTIVE SUMMARY

Why did we take up this audit?

Delhi Transport Corporation was established as a Statutory Corporation in 1971 under the Road Transport Corporation Act, 1950 as amended by Delhi Road Transport Laws (Amendment) Act 1971, to provide an efficient, economical and properly coordinated road transport service in Delhi. The Corporation, as on 31 March 2022, had a fleet of 3,762 buses in its 36 depots operating on 461 city and seven National Capital Region (NCR) routes. It carried on an average of 15.62 lakh passengers per day, with a manpower of 30,591 employees and had a turnover of ₹ 660.37 crore in 2021-22. As on 31 March 2023, the Corporation had a fleet of 3,937 buses.

This Performance Audit was taken up considering the essential bus service being provided by the Corporation in Delhi and the fact that it has been continuously incurring losses.

Audit examined whether the resources were utilised optimally to achieve operational efficiency and management of services was done based on sound business principles during the period of seven years from 2015-16 to 2021-22.

What audit found?

The key audit findings are detailed as below:

The Corporation had not prepared any Business Plan or Perspective Plan. No MoU was signed with Government of National Capital Territory of Delhi (GNCTD) for setting targets in respect of various physical and financial parameters to contain its working losses. It did not benchmark its performance with parameters of other State Transport Undertakings (STUs). Further, the Corporation had not conducted any study on profitability/sustainability even though it was incurring losses continuously.

During the period 2015-23, fleet of the Corporation reduced from 4,344 (2015-16) to 3,937 buses (2022-23). The Corporation could procure only 300 Electric buses (EBs) during 2021-22 and 2022-23 despite availability of funds from GNCTD. There was delay in addition of EBs in the fleet for which penalty amounting to ₹ 29.86 crore for delayed delivery was not imposed on the operators.

The number of low floor overaged buses in the Corporation during 2015-22 increased from 0.13 *per cent* (five buses) to 17.44 *per cent* (656 buses) which further increased to 44.96 *per cent* (1,770 buses) as on 31 March 2023 of its total fleet. The proportion of overage buses would be rising further if the Corporation does not make sincere efforts to procure/add new buses.

The operational efficiency of the Corporation vis-à-vis All India Average in respect of fleet utilization and vehicle productivity was on lower side. The fleet utilisation of the Corporation ranged from 76.95 *per cent* to 85.84 *per cent* and vehicle productivity per day per bus ranged from 180 kilometers (Kms) to 201 Kms as against target ranging from 189 to 200 Kms per bus per day during 2015-22, due to frequent breakdowns and existence of 656 overaged buses in its fleet as on 31 March 2022.

Route planning was deficient. The Corporation was operating on 468 routes (57 *per cent*) out of 814 routes as on 31 March 2022. The Corporation was unable to recover its operational cost in any of the routes operated by it. As a result, it suffered operational loss of ₹ 14,198.86 crore on operations during 2015-22. The scheduled Kms missed by buses ranged from 7.06 to 16.59 *per cent* and number of breakdowns ranged from 2.90 to 4.57 per 10,000 Kms of operations during 2015-22. This resulted in loss of potential revenues of ₹ 668.60 crore due to missed scheduled Kms and higher rates of breakdowns during 2015-22.

Project for Automatic Fare Collection System (AFCS) Phase-I was commissioned (December 2017), but due to inability of system integrator to run the same, it was not functional since May 2020.

CCTV System was installed and commissioned in 3,697 buses in March 2021 and payment of ₹ 52.45 crore was released to the contractor but pending the user acceptance test of the system, it was not declared Go live. Thus, this system was not fully operational in buses as of May 2023.

The performance of Cluster buses operated by Delhi Integrated Multi-Modal Transit System Limited (DIMTS) was better in every operational aspect except operational revenue per Kms as compared to the performance of the Corporation buses even though both were operating in the same city and under similar circumstances.

The Corporation does not have the autonomy for fare determination due to which it was unable to fully recover its operational cost. The fare of the Corporation buses was last revised and made effective from 3 November 2009. To compensate the same, GNCTD extends financial support as Annual Revenue Grant and reimbursement against concessional passes and subsidy for free travels by lady commuters.

The Corporation had outstanding dues of ₹ 225.31 crore recoverable from the Transport Department against unreceived rent, service tax and water charges for space transferred for operation/parking of Cluster buses. Further, Property Tax and Ground Rent of ₹ 6.26 crore on these depots and ₹ 4.62 crore in providing vehicles to the Transport Department also remained unrecovered.

The Corporation lost the opportunity to earn potential revenue due to delay in awarding of advertising contracts and also failed to augment its revenue by utilising the available space at depots for commercial purpose.

The Corporation incurred avoidable liability of interest and penalty of ₹ 63.10 crore due to wrongly availing of Input Tax Credit for Goods and Services Tax on exempted services.

There seems to be no laid down road map for checking the downward spiral of the finances of the Corporation and ensuring its fiscal sustainability.

The Personnel Policy of the Corporation was approved in principle by the Board in 2013 but thereafter, no revision of same was made. Consequently, the Corporation was not able to decide the cadre-wise actual requirement of its staff with respect to available fleet of buses. There were shortages across all the cadres except Conductors. Surplus Conductors were deployed in other administrative jobs.

Internal control mechanism was deficient. There were inefficient managerial controls and lack of accountability. Audit noticed indecisiveness in finalising the tenders for purchase of new buses, weak operational control, lack of coordination amongst divisions, lack of follow up with debtors, delay in statutory compliances, etc., leading to losses to the Corporation.

What we recommend?

1. *The Department should ensure that Short and Long Term Plans prescribing benchmarks and taking into account the best practices of Industry are formulated to make the operations of the Corporation effective and sustainable.*

2. *The Corporation needs to maximize its potential to generate non traffic revenue, explore new avenues and make all out efforts to develop pending projects for commercial use of land to improve its financial position.*

3. *The Corporation needs to expedite availability of the prescribed number of road-worthy buses for operations with the AMC contractors.*

4. *The Corporation needs to undertake periodic review of load factor and re-strategise the distribution of buses to optimise the revenue within the ambit of its social commitment. Further, the Corporation should conduct periodic review of routes for optimum utilisation of buses.*

5. *The Corporation needs to analyse the gaps between its performance and that of DIMTS and steps need to be taken to adopt the factors necessary to improve its performance.*

6. *The Corporation should take up the matter with the Department to speed up the process for implementing the AFCS system and also installation of CCTV System for safety of passengers.*

7. *The Personnel Policy of the Corporation should be reviewed for optimum utilisation of manpower and to have proper mechanism for their engagement and deployment.*

Chapter 1

Introduction

Delhi Transport Corporation

Performance Audit on 'Functioning of Delhi Transport Corporation'

Chapter 1: Introduction

Delhi Transport Corporation (Corporation) was established as a Statutory Corporation in 1971 under the Road Transport Corporations Act, 1950 (Act) as amended by Delhi Road Transport Laws (Amendment) Act, 1971, to provide an efficient, economical and properly coordinated road transport service in Delhi. The Union Government took over (November 1971) the assets and liabilities from the erstwhile Delhi Transport Undertaking, operated by Municipal Corporation of Delhi. Subsequently, the administrative control of the Corporation was transferred to the Government of National Capital Territory of Delhi (GNCTD) in August 1996.

As of March 2022, the Corporation had a fleet of 3,762 buses operating from 36 depots on 461 city and seven National Capital Region (NCR) routes catering to an average of 15.62 lakh passengers per day. For carrying out its operations, it had a manpower of 30,591 employees.

Financial Performance

The Corporation had paid up Capital and Turnover of ₹ 1,983.85 crore and ₹ 660.37 crore respectively as on 31 March 2022. Turnover comprised of Operating Revenue of ₹ 558.78 crore and Non-Operating Revenue of ₹ 101.59 crore. Further, the Corporation received Revenue Grants of ₹ 2,320 crore during the year 2021-22. The total expenditure incurred by the Corporation was ₹ 11,489.72 crore comprising operating expenditure of ₹ 3,060.33 crore and non-operating expenditure of ₹ 8,429.39 crore. Non-operating expenditure mainly included interest cost of ₹ 8,375.92 crore for the year 2021-22 on GNCTD Loan, which has not been paid by the Corporation since 2011-12. The Corporation incurred Loss of ₹ 8,498.35 crore in the year 2021-22 which, after excluding unpaid interest for the year, was reduced to ₹ 122.43 crore. The Corporation had been incurring losses mainly due to heavy burden of interest cost on GNCTD loan, which was 72.90 *per cent* of the total expenditure. To meet the deficit after excluding interest cost, GNCTD financed the Corporation by Revenue Grants.

1.1 Objectives of the Corporation

Following objectives are laid down for the Corporation as per the Act:

(i) To provide or secure or promote an efficient, economical, reliable and properly coordinated system of road transport;

(ii) In doing so, it shall act on Business principles;

(iii) To achieve a high level of Operational efficiency;

(iv) To charge fares not exceeding those prescribed by the State; and

(v) To attain financial self-sufficiency.

1.2 Organisational set up

The Board of the Corporation comprises Chairman and 17 Directors to be appointed by Lieutenant Governor. As per requirement seven official members and 10 non-official members are to be appointed in the Board. As against this, the existing Board consists of Chairman (Hon'ble Minister of Transport, GNCTD), the Managing Director (MD) and five Directors (official members) and no non official Director. MD, being the Chief Executive, manages day-to-day operations of the Corporation with the assistance of four Chief General Managers[1], four Regional Managers, Financial Advisor and Chief Vigilance Officer.

1.3 Share of the Corporation in Public Transport

The Hon'ble High Court directed (September 2007) (GNCTD) to augment the city bus fleet to 11,000 buses, by the end of March 2009. Based on the "Report on Methodology for Operation of Privately owned Stage Carriage Buses in Delhi" prepared by M/s Delhi Integrated Multi-Modal Transit System Limited (DIMTS) in October, 2007, the GNCTD introduced a new scheme (May 2011) which envisaged concurrent operation of the Corporation and private operators in 'Cluster' under a Unified Time Table with each cluster being part of a network, for providing stage carriage services in Delhi through the Corporation and Cluster buses in equal ratio on each route (5,500 buses each by the Corporation and Cluster buses). Against this, fleet of the Corporation and Cluster buses consisted of 3,937 and 3,293 buses respectively as on 31 March 2023.

1.4 Audit objectives

Main audit objectives were to assess whether:

- Operational planning was done to provide an efficient, economical, reliable and coordinated system of road transport;
- adequate resources (financial, human and equipment) were available and utilised optimally to achieve operational efficiency;
- implementation and management of services were based on sound business principles; and
- internal control mechanism was effective.

[1] One each for Technical, Operations & Personnel, Strategic Business Unit and Legal.

1.5 Audit criteria

The Audit findings were evaluated against criteria sourced from the following:

- Performance standards and operational norms fixed by the Association of State Road Transport Undertakings (ASRTU), and State Transport Undertakings Profile and Performance published by the Central Institute of Road Transport, Pune (CIRT);
- Agenda and minutes of the meetings of the Board of Directors and Audit Committee of the Corporation.
- Physical and financial targets/ norms fixed by GNCTD and the Management;
- Manufacturers' specifications, norms for life of buses, preventive maintenance schedules and fuel efficiency norms;
- Relevant rules and regulations and instructions issued by Government of India (GoI) and Transport Department (Department), GNCTD;
- Sanction orders of grants/subsidies received by the Corporation and their utilisation certificates, and
- Procedures and norms laid down by the Corporation for operation of buses.

1.6 Audit scope and methodology

A Performance Audit (PA) on the working of the Corporation for the period 2010-11 to 2014-15 appeared as Para No 2.2 in the Audit Report for the year ended 31 March 2015, GNCTD. The Report had not been discussed by the Committee on Government Undertakings (CoGU) so far (May 2023). The present Performance Audit on the functioning of the Corporation was conducted from July to December 2022, covering a period of seven years from 2015-16 to 2021-22. Audit examined records of the Corporate Office, Traffic Department, Strategic Business Unit, Operations Department, Publicity Division, Stores Purchase Department, Civil Engineering Department, Central Workshops, Information Technology Department, four Regional offices (controlling 36 depots/Cluster depots),10 depots (selected for audit through random sampling method) and Transport Department.

An Entry Conference with the Managing Director of the Corporation, to discuss Audit methodology, Scope, Objectives and Criteria, was held in June 2022. The Draft PA report was issued (February 2023) to both Department and Corporation. Reply of the Corporation was received on 18 May 2023 while the reply of the Department was awaited (November 2023). The Audit findings were also discussed with the Corporation Management in an Exit Conference held on 20 April 2023. No representative from Department attended the Exit Conference. The replies received from the Corporation have been suitably incorporated in the Report.

Acknowledgment

We acknowledge the cooperation extended by the Corporation and the Department during the conduct of performance audit.

1.7 Structure of the Report

The findings of the performance audit have been arranged in line with the audit objectives and are discussed in the following chapters:

Chapter 2: Planning and Financial Management;

Chapter 3: Operational Performance;

Chapter 4 Procurement of buses and Implementation of Intelligent Transport System;

Chapter 5: Human Resource Management;

Chapter 6: Other issues; and

Chapter 7: Internal Control Mechanism

Chapter 2

Planning and Financial Management

Chapter 2: Planning and Financial Management

For efficient and effective transport services and to cope up with the growing demands, it was essential for the Corporation to formulate appropriate long-term/short-term plans to strategise various Operational and Financial requirements. Transport Department, being the administrative department, used to take major decisions on operations, routes, fare fixation & development of depots and operational and procurement decisions were taken by the Corporation. However, Audit noticed absence of a Business Plan or a Perspective Plan in the Corporation. No MoU was signed with GNCTD by the Corporation for fixation of physical and financial targets.

Financial health of the Corporation had deteriorated over the period. The Corporation incurred huge operational and manpower expenditure which was not commensurate with the revenue earned resulting in accumulation of losses, low solvency ratio and negative net worth. The Operating Revenue collection had a decreasing trend due to non-revision of fare and lower commuter base. No major initiatives were taken towards raising the Non-Operational Revenue which was evident from non-recovery of rent of ₹ 225.31 crore on account of transfer of depots for Cluster buses, delayed decisions in awarding contracts for display of advertisements and also failure to utilise the available space at depots for commercial use. The accumulated losses over the years increased from ₹ 25,299.87 crore in 2015-16 to ₹ 60,741.03 crore in 2021-22 despite annual support of Revenue Grants from GNCTD. There was no laid down road map for checking the downward curve of the finances of the Corporation and ensuring its fiscal sustainability.

2.1 Planning

Planning provides directions to an organisation for achieving its objectives by decreasing chances of risk on overlapping and wasteful activities. It further aids in decision making and encourages innovative ideas. The importance of planning for the Corporation which aims to provide transport services to the people of national Capital of Delhi cannot be overstated, considering the magnitude of the task. Although many aspects of the functioning of the Corporation such as route identification, purchase of land, fixing bus fare, etc. rest with the GNCTD, important activities like planning for operations and procurement of buses, manpower utilisation, etc., are the responsibility of the Corporation itself, at times in consultation with the Department. Thus, in order to fulfil the mandated objectives, it is imperative that the Corporation should have a long term as well as short term plans detailing as to how to achieve its objectives within the specified timelines.

2.1.1 Absence of Short-Term and Long-Term Plans

The Corporation has been mandated by the Act, to provide an efficient, adequate and economical road transport service to the people of Delhi. For mandated objective, the Corporation should have prepared Long Term and Short-Term Plans. The Corporation prepares operational plan which involves determination of routes to be operated, number of trips to be scheduled, setting of annual operational targets and preparation of schedule for off-shedding buses at different times of the day etc. However, it has prepared neither any Business Plan containing a formal statement of its goals and determining targets of operational and financial parameters to achieve the goals, nor a Perspective Plan i.e. a blue print regarding the objectives and targets for long term growth during the period of seven years ending March 2022. In the absence of proper planning, the efforts of the Corporation for achieving its mandated objectives were directionless and un-coordinated. Such absence of proper planning may also have contributed to the below-par performance of the Corporation in operational and financial parameters as discussed in the subsequent chapters of the Report.

The Management stated (May 2023) that Route Rationalisation work was done by DIMTS and procurement or hiring of buses was undertaken by the Corporation. The reply does not address the issue regarding absence of Business Plan or Short Term Plan for operational and financial targets and Perspective Plan or Long Term Plan regarding objectives and targets for future growth of the Corporation.

Other shortcomings in Planning are discussed in the following paragraphs.

2.1.2 No MoU signed with GNCTD for fixation of physical and financial targets

To contain the losses of the Corporation, the Planning Department, GNCTD emphasised (May 2010) that the Corporation should sign a Memorandum of Understanding (MoU) with Transport Department for setting targets in respect of various physical and financial parameters to contain its working losses. However, neither the Corporation signed any MoU with the Department nor did the Department pursue the matter. This was especially important as the Corporation was consistently suffering losses over the years. In the absence of targets, GNCTD was deprived of the parameters for evaluation of performance of the Corporation.

The Management accepted (May 2023) the Audit Observation and stated that Corporation is ready to sign MoU with GNCTD as and when Government desires the same. No reply was however received from the Department.

2.1.3 Failure in determining benchmarks and adherence to best practices

One of the important aspects of Planning is to provide the Organisation an opportunity to compare itself with other similar Organisations and incorporate best practices in the Industry in its functioning. However, it was observed that the Corporation did not benchmark its performance with parameters of other State Road Transport Undertakings (SRTUs) to determine areas which call for improvements. It also did not follow the best practices[1] of other SRTUs like Call Centre for obtaining Passenger Feedback in Telangana State Road Transport Corporation; SMS based crew management for city bus operations in Chandigarh Transport Undertaking (CTU); Intelligent Transport System and Smart Phone Application in Bengaluru Metropolitan Transport Corporation (BMTC) and Integrated Intelligent Transport System (IITS) in Navi Mumbai Municipal Transport (NMMT), Navi Mumbai.

The Corporation accepted (May 2023) the Audit Observation.

2.1.4 Lack of efforts in conducting profitability/sustainability study

In order to prepare an effective course of action for increasing profitability/sustainability, availability of information regarding issues affecting these aspects are necessary. However, the Corporation had not conducted any study on profitability/sustainability so as to make necessary improvements in its operations to increase economy and efficiency even though it was incurring continuous losses over the years.

The Corporation accepted (May 2023) the Audit Observation.

2.1.5 Comparative analysis of operation of DTC vis-à-vis DIMTS not made

Since Delhi Integrated Multi-Modal Transit System Ltd. (DIMTS) also operates Cluster buses, operations of which were similar to the Corporation's operation, the Corporation was in a unique position to take advantage of the expertise of DIMTS in improving its Financial and Operational Performances. The performance of DIMTS was much better than that of the Corporation on the basis of certain performance indicators viz. fleet utilisation, vehicle productivity, load factor and reduced breakdown. The Board observed (May 2018), a fall in operational and financial parameters in the year 2016-17 as compared to 2015-16 and directed that steps be taken to increase the operational and financial performance. The Board had also desired that a comparative analysis be made regarding financial and operational performance of the Corporation vis-à-vis DIMTS. However, no comparative analysis was carried out by the Corporation.

The Management stated (May 2023) that the Financial Performance of the Corporation with DIMTS was not comparable due to huge Permanent and Contractual staff and payment of Ground Rent and Property Tax of the Depots which were used by DIMTS as well for its Cluster buses without any cost.

The reply is, however, silent as regards to poor operational performance despite having huge permanent and contractual staff. The fact remains that the Corporation had not even done the comparative analysis of operational

[1] As identified in the Best Practices Manual of State Road Transport Undertakings published by the ASRTU.

performance with DIMTS and lost the opportunity to take advantage of expertise of DIMTS in improving its Operational Performance in the form of better fleet utilisation, vehicle productivity, load factor and the reduced breakdowns.

Recommendation 2.1:

- ***The Corporation should have an MoU with GNCTD for fixing physical and financial targets for the evaluation of its performance by the Department;***
- ***The Department should ensure that Short and Long Term Plans prescribing benchmarks and taking into account the best practices of Industry are formulated to make the operations of the Corporation effective and sustainable.***

2.2 Financial Management

The Corporation is dependent on GNCTD for funding its viability gap through revenue grants as revenue is not sufficient to cover the operational costs. The Corporation avails grants from GNCTD to meet the deficit based on assessment of its estimated revenue and expenditure. The requirement of funds is forwarded by the Corporation to the Department. The Department, based on the Budget Estimates, approves the Grants-in-Aid for meeting the estimated excess expenditure over income of the Corporation and same is included in the GNCTD budget for the next year.

2.2.1 Financial Position

The Financial Position and Working results of the Corporation are detailed in **Annexure 2.1** and **2.2**. Further, details of Revenue earned, Expenditure incurred and Loss suffered by the Corporation during the seven years from 2015-16 to 2021-22 are detailed in **Table 2.1**.

Table 2.1: Details of Revenue, Expenditure and Loss of the Corporation

(₹ in crore)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Operating Revenue	914.72	839.10	810.12	777.57	792.44	454.42	558.78
Non-Operating Revenue	90.27	79.60	79.21	106.71	100.30	55.00	101.59
Revenue Grants from GNCTD	**1174.00**	**1550.00**	**2007.00**	**1825.00**	**2030.00**	**2475.00**	**2320.00**
Capital Grants & other prior period income, etc.	118.86	21.65	62.12	32.69	19.80	9.76	11.00
Total Revenue	**2297.85**	**2490.35**	**2958.45**	**2741.97**	**2942.54**	**2994.18**	**2991.37**
Operating Expenditure	2398.50	2449.87	2770.49	2692.26	2870.38	3104.10	3060.33
Non-Operating Expenditure:							
Interest cost on GNCTD Loan	**3277.14**	**3830.59**	**4487.48**	**5252.03**	**6144.55**	**7176.23**	**8375.92**
Other than interest cost expenditure	33.31	53.51	29.90	78.23	74.66	56.00	53.47

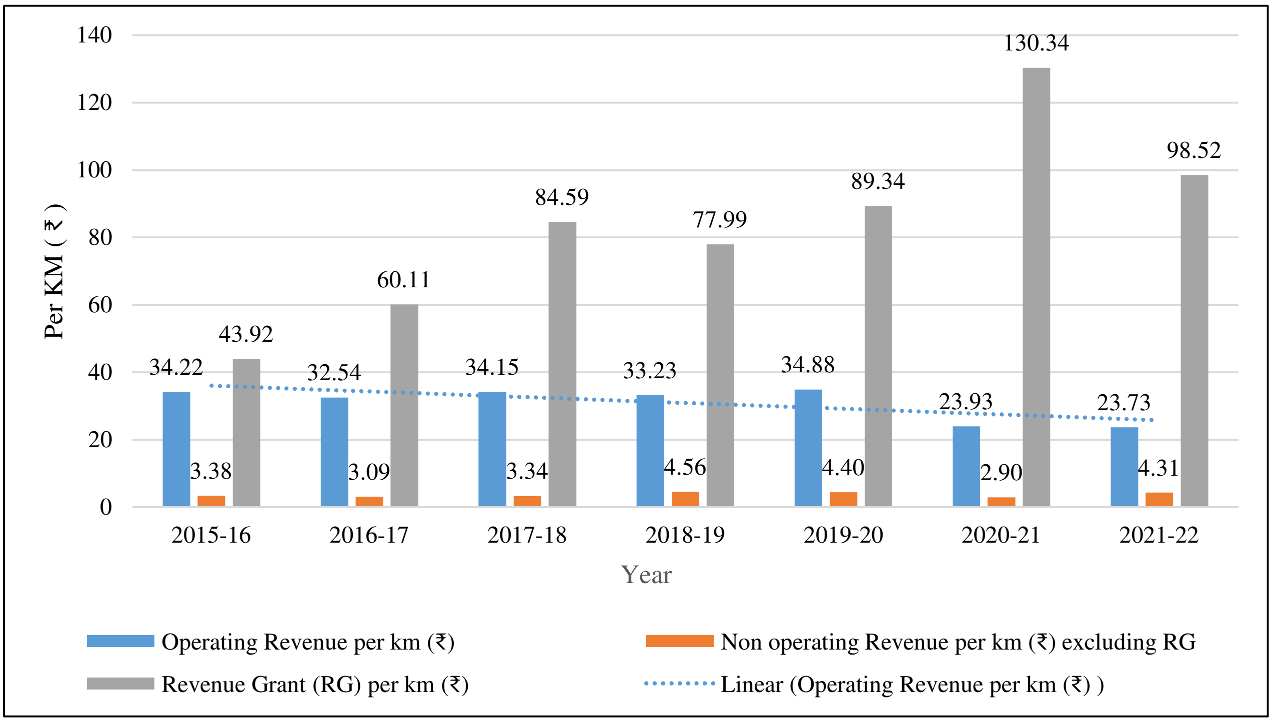
Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Total expenditure	**5708.95**	**6333.97**	**7287.87**	**8022.52**	**9089.59**	**10336.33**	**11489.72**
Operating loss for the year (Operating revenue - operating expenditure)	**1483.78**	**1610.77**	**1960.37**	**1914.69**	**2077.94**	**2649.68**	**2501.55**
Total Loss for the year (Total Revenue – Total Expenditure)	**3411.10**	**3843.62**	**4329.42**	**5280.55**	**6147.05**	**7342.15**	**8498.35**

Source: Annual Accounts of DTC

It may be seen from above Table that the Revenue from Operation had declined over the years and during 2020-21 and 2021-22, there was significant reduction in Revenue mainly due to the impact of Covid pandemic. There was an increasing trend of Operating Loss as Operating Expenditure was always at higher side corresponding to Operating Revenue which made the Corporation dependent heavily upon the financial support of GNCTD (Revenue Grant). As can also be seen from the above Table, during the period 2015-22, total operating revenue of ₹ 5147.15 crore was less than total operating expenditure of ₹ 19345.93 crore. However, revenue grant received by the Corporation from GNCTD during the above period was only ₹ 13,381 crore, thereby revenue gap was accumulated to ₹ 817.78 crore[2].

The **Chart 2.1** shows the trend of per km Operating Revenue, Non-Operating Revenue and Revenue Grants received (for meeting the deficit) during the period 2015-16 to 2021-22.

Chart 2.1: Revenue Trend

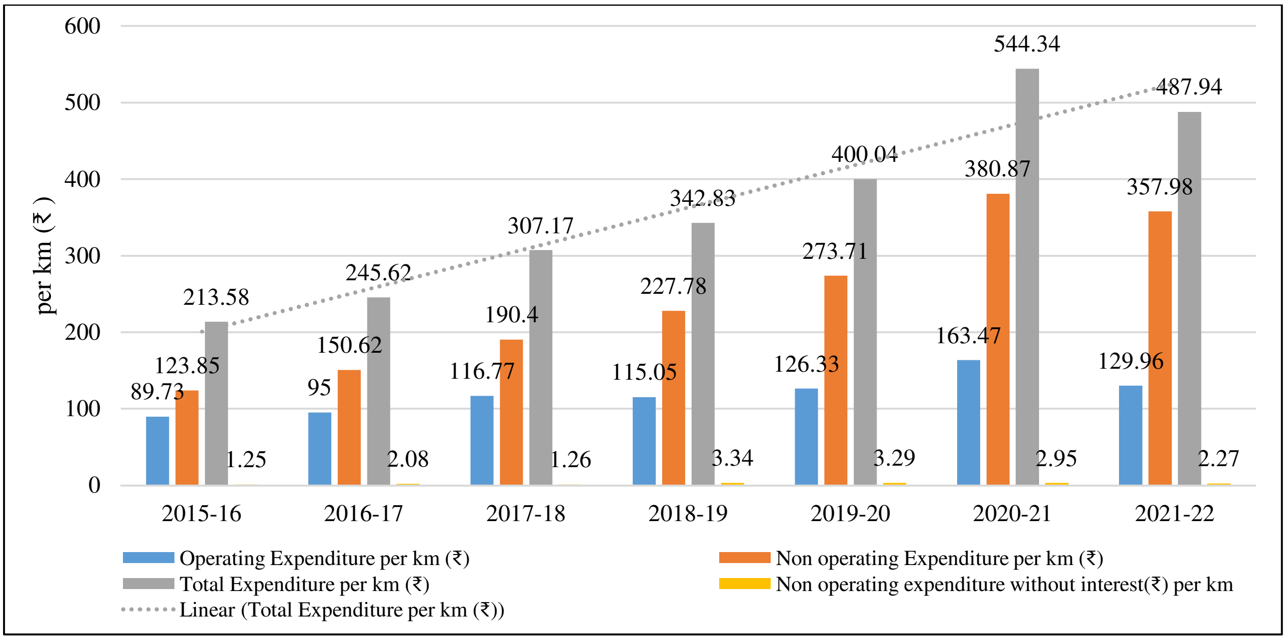


Source: Annual Accounts of DTC

[2] ₹ 19345.93 crore minus (₹ 5147.15 crore plus ₹ 13,381 crore).

Chart No. 2.2 shows per km Operating Expenditure, Non-Operating Expenditure, Total Expenditure and Non-Operating Expenditure (excluding accrued interest) during the period 2015-16 to 2021-22.

Chart 2.2: Expenditure trend



Source: Annual Accounts of DTC

2.2.2 Analysis of Operating and Non-Operating Expenditure

Details of the Operating and Non-Operating Expenditure of the Corporation over the period of Audit are shown in **Table 2.2 (Annexure 2.2)**.

Table 2.2: Elements wise details of the expenditure

(₹ in crore)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Operating Expenditure							
CNG, Oil & Lubricants & Repair & Maintenance	430.29	398.93	409.43	437.12	455.56	352.33	509.70
AMC Charges -Low Floor Buses	229.29	264.60	280.65	312.41	352.58	356.19	485.34
Employee cost	1487.74	1551.14	1837.76	1695.70	1799.73	2174.25	1845.90
Depreciation	168.64	168.98	168.66	167.55	166.48	149.53	134.25
Other Misc. operating expenses	82.54	66.22	73.99	79.48	96.03	71.80	85.14
Total Operating Expenditure	**2398.50**	**2449.87**	**2770.49**	**2692.26**	**2870.38**	**3104.10**	**3060.33**
Non-operating Expenditure							
Interest on GNCTD loans	3277.14	3830.59	4487.48	5252.03	6144.55	7176.23	8375.92
Others (Interest on equity capital and plan loan reappropriated to capital reserve and other misc.)	33.31	53.51	29.90	78.23	74.66	56.00	53.47
Total Non-operating expenditure	**3310.45**	**3884.10**	**4517.38**	**5330.26**	**6219.21**	**7232.23**	**8429.39**
Total expenditure	**5708.95**	**6333.97**	**7287.87**	**8022.52**	**9089.59**	**10336.33**	**11489.72**

Source: Annual Accounts of the Corporation

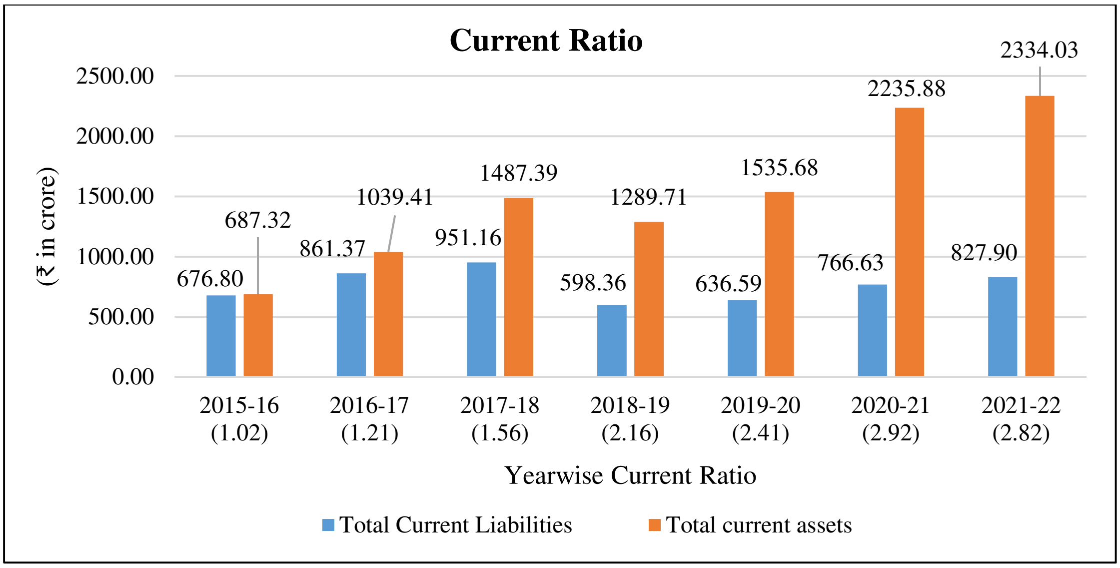
It is evident from the above table that Employee Cost constitutes a major portion of the Operating Expenditure and ranged between 60.32 *per cent* and 70.04 *per cent* of the total Operating Expenditure. Further, there was a sharp rise in Annual Maintenance Contract (AMC) charges of Low Floor Buses which had more than doubled during the period of seven years.

On the other hand, Non-Operational Expenditure mainly comprised of interest on GNCTD Loans. The cumulative interest of ₹ 47,800.43 crore on GNCTD loans as on 31.03.2022 had not been paid since 2011-12 to GNCTD and the same had been booked in Accounts on accrual basis. The Corporation, in this regard, had forwarded a draft Cabinet Note to the Department in December 2016 for conversion of Plan Loans of ₹ 511.30 crore into Equity and conversion of Non Plan Loan of ₹ 11,164.84 crore along with outstanding accrued interest of ₹ 12,499.99 crore up to 31 March 2016 into Grants in Aid. However, it was pending for approval of the Cabinet as of May 2023.

2.2.3 Financial Ratios

Short Term Solvency: Short term solvency of an entity is determined by Current Ratio (Working Capital Ratio) i.e., the extent of Current Assets available to honour the upcoming Short-Term Liabilities. Further whether the Current Assets are in such a form that these can be readily converted into Cash to pay off the Current Liabilities is denoted by Liquidity Ratio. Short term Solvency position of the Corporation can be seen from the **Chart 2.3** and **Annexure 2.1**.

Chart 2.3: Short Term Solvency Position



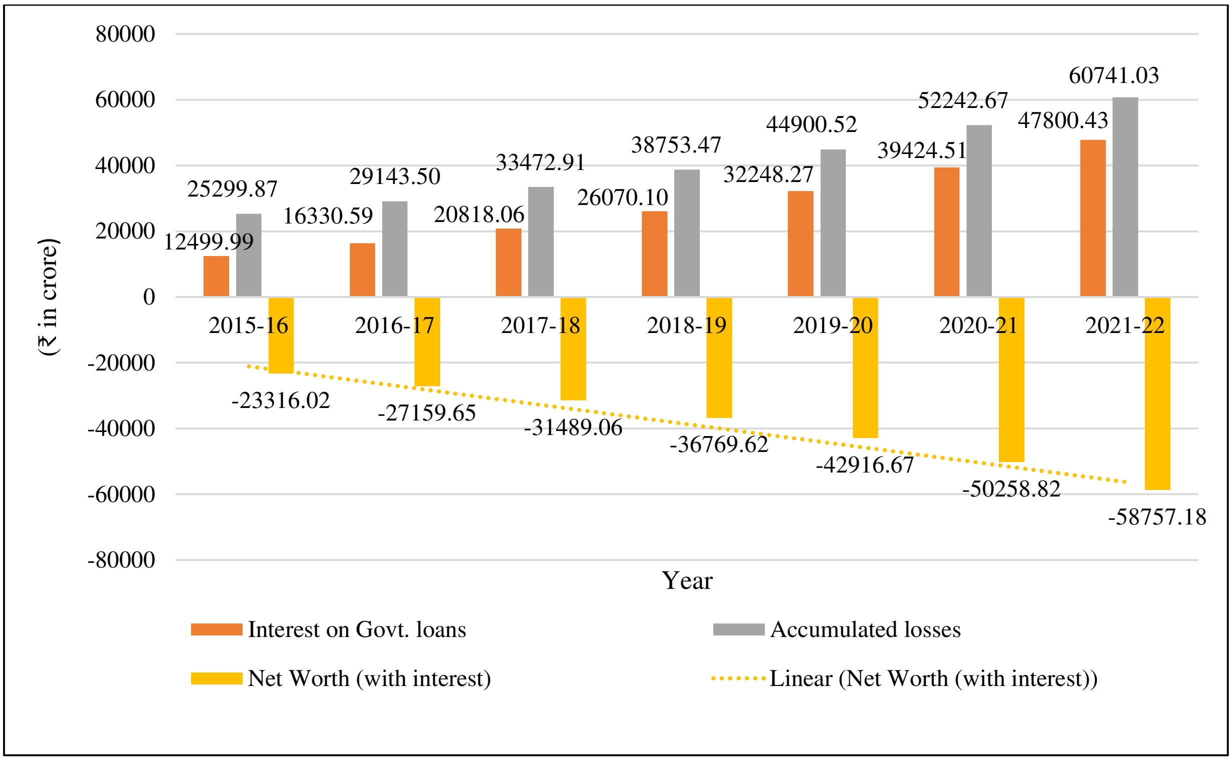
Source: Annual Accounts of DTC

Although, prima-facie, the Current Assets of the Corporation seems to comfortably cover the Short-Term Liabilities (as the Current Ratio has improved to 2.92 in 2020-21), however, Current Assets include Debtors and Advances (54.40 *per cent* in 2021-22) which were blocked up (mainly because of deposit with court and unrealised debtors). Further, 43.36 *per cent* of Debtors were more than three years old and their realisation was doubtful.

The Current Assets also include Bank Deposits which were earmarked against Grants received for Specific Purposes / Earmarked Funds (₹ 347.79 crore i.e., 14.90 *per cent* of total Current Assets). As such, these funds cannot be used for other purposes being earmarked funds. Thus, effective Liquid Assets available to pay off its Short Term Liabilities amounted to ₹ 716.51 crore i.e., 30.70 *per cent* of total Current Assets. The resultant Liquidity Ratio was, thus, reduced to 0.87[3], reflecting unsatisfactory financial position of the Corporation.

Long Term Solvency denotes the financial position of an organisation with regard to sufficiency of its assets to balance its Long Term Liabilities. The Net Worth of an organisation is the value of assets after deducting its liabilities which is an indicator for assessing Long Term Solvency. The Net Worth of the Corporation had completely eroded and was in negative figures during the period 2015-2022 as indicated in **Charts 2.4.1** and **2.4.2**.

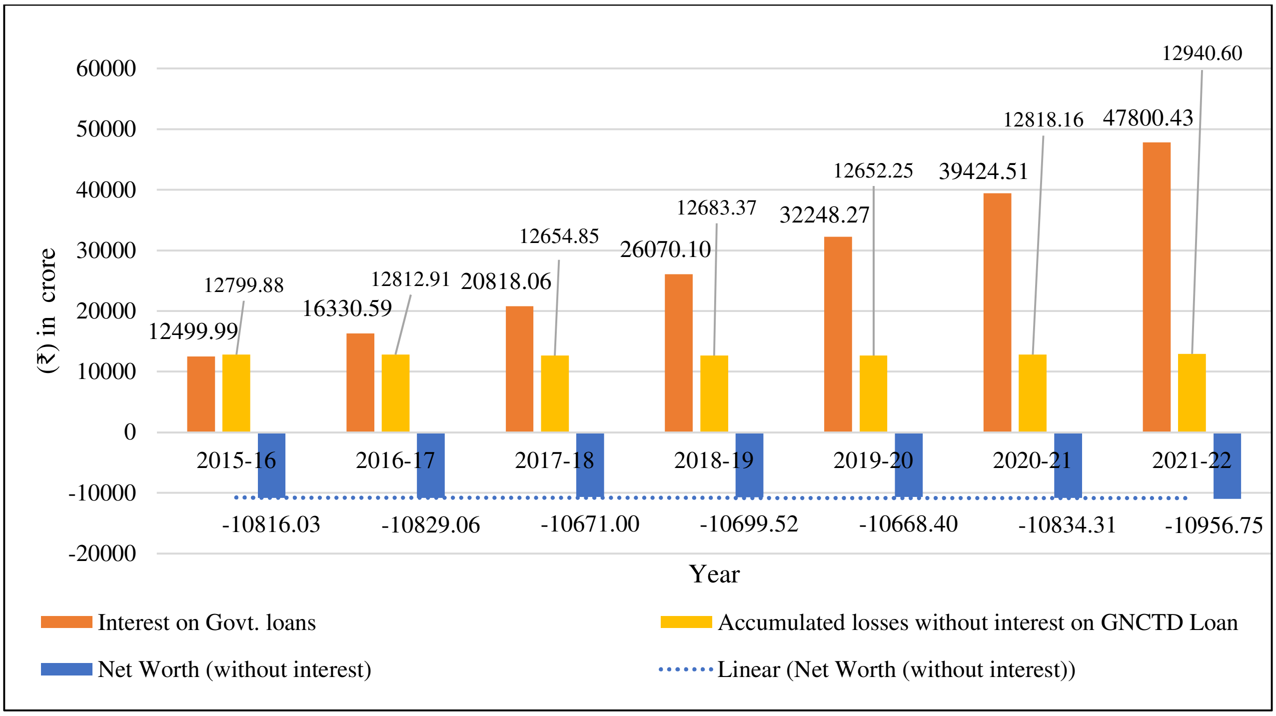
Chart 2.4.1: Long Term Solvency considering accumulated interest on Loans



Source: Annual Accounts of DTC

[3] ₹ 2334.03 crore (Total Current Assets) - ₹ 929.71 crore (Debtors) - ₹ 340 crore (Advances) - ₹ 347.81 crore (Earmarked Funds)/ ₹ 827.90 crore (Current Liabilities).

Chart 2.4.2: Long Term Solvency without Accumulated Interest on Loans



Source: Annual Accounts of the Corporation

It may be seen from above that during all the years under review the Net Worth was negative and increased from (-) ₹ 23,316.02 crore (2015-16) to (-) ₹ 58,757.18 crore (2021-22) due to huge accumulated losses. Thus, as on 31 March 2022, the Corporation was not able to pay off its huge liabilities amounting to ₹ 60,483.69 crore. The erosion in Net Worth was owing to the Corporation's revenues being not sufficient to service its Operational Expenditure which resulted in accumulation of losses to ₹ 60,741.03 crore as of 31 March 2022.

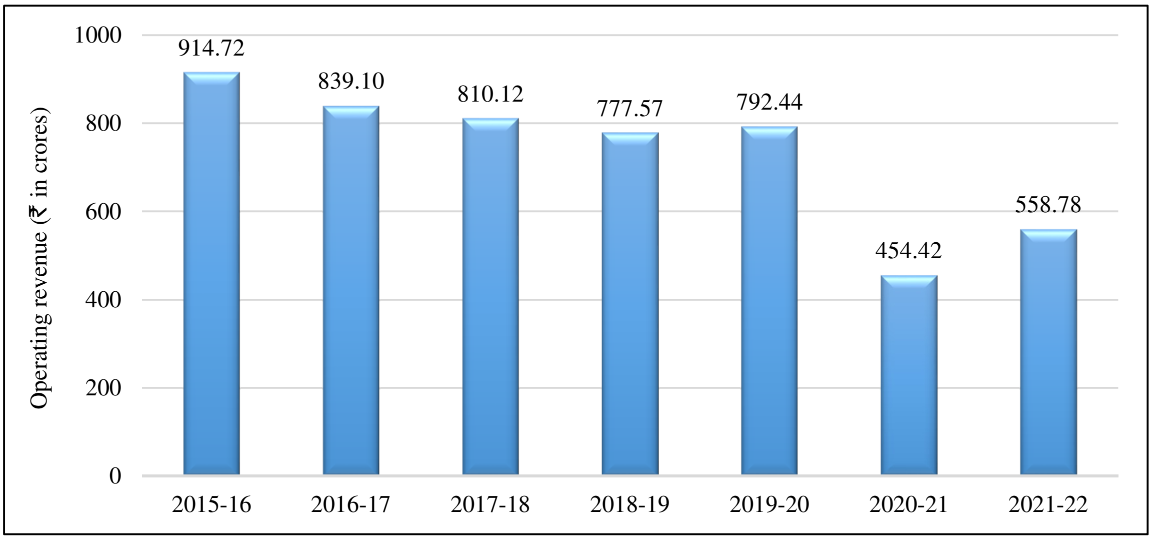
Further, even in case, accumulated accrued interest on GNCTD Loans which was not paid since 2011-12 is excluded from accumulated losses, the net worth remained more or less constant with minor change from (-) ₹ 10,816 crore (2015-16) to (-) ₹ 10,956.75 crore (2021-22) mainly due to old accumulated losses. Moreover, during 2017-20, net worth was even reduced to the range of (-) ₹ 10,671 crore to (-) ₹ 10,668.40 crore and during last two years, negative Net Worth further increased due to low operating revenue impacted by Covid pandemic. Thus, the Corporation was dependent upon the Revenue Grants (₹ 13,381 crore during last seven years) to meet out its deficits to sustain its operations due to persistent Operational Losses during the last seven years.

Thus, overall financial position and working results of the Corporation raise a serious concern about its Long-Term Solvency and Fiscal sustainability due to persistent Operational Losses and old accumulated losses.

2.2.4 Operating Revenue

Operating Revenue is the revenue that an entity generates from its primary business activities. Major sources of Operating Revenue for the Corporation were the sale of tickets, contract services, passes and season tickets, subsidy against concessional passes and reimbursement against free travelling of lady commuters. Operating Revenue had declined over the years as depicted in **Chart 2.5**.

Chart 2.5: Operating Revenue



Source: Annual Accounts of the Corporation

As per Section 22 of the Act, the Corporation shall act on business principles. However, the Corporation does not have the autonomy for fare determination (last fare revision was done in 2009), and as a social obligation, fares were kept at an affordable level which does not help to recover even its variable cost. To compensate the same, GNCTD extends financial support in the form of reimbursement against concessional passes and subsidy against free travels, which was lower than the economic rates, besides Annual Revenue Grant. As may be seen from Chart 2.5, Operating Revenue of the Corporation had decreased throughout the Audit period. The main reasons for decline were attributed to fares not revised by the GNCTD since 2009, Covid-19 effect from March 2020 to March 2022, introduction of more Metro Lines and increase in personal vehicles. Further, number of Buses held had declined (13.40 *per cent*) during 2015-22 from 4,344 buses in 2015-16 to 3,762 buses in 2021-22 resulting in decline in Operated KMs from 2,673.50 lakh KMs in 2015-16 to 2,354.74 lakh KMs in 2021-22. Decline in Operated KMs resulted in decline in Operating Revenue.

Audit further observed that there were some areas where the Corporation lost the opportunity to avail benefits of Government support which consequently led to reduction in Operating Revenue over the years as discussed in subsequent paragraphs.

2.2.4.1 Bus fares not revised since 2009

Section 19 (n) of the Act read with Section 22 envisages that the Corporation may determine the fare structure for carriage of passengers with prior approval of the State Government keeping in view the business principles.

The fare of buses was last revised and made effective from 3 November 2009. Since then, the Corporation had pursued several times with the GNCTD for fare revision during 2010 to 2012, and thereafter in November 2016. However, no revision of fare was done even though major elements of variable cost had increased manifold. The deficit was compensated by Revenue Grant from GNCTD.

The Government of India, Ministry of Finance, Department of Revenue (Tax Research Unit) notified (February 2016) applicability of Service Tax on Air-Conditioned Bus fare w.e.f. 1 June 2016. As a result, Service Tax of 15 *per cent* was applicable on 40 *per cent* of the fare of AC buses, leading to six *per cent* increase in cost of tickets of AC buses. Accordingly, the Corporation made request to the Department in November 2016, for approval of the GNCTD to increase the AC bus fare by six *per cent* to mitigate the Service Tax liability.

The Department taking a view that increasing AC bus fare by six *per cent* would result in irrational fares and cause inconvenience to commuters, suggested (November 2016) revision of the fare structure as given in **Table 2.3**.

Table 2.3: Proposed revised fare structure

Type of Service	Slab (Distance): Existing Fare	Slab (Distance)/ Proposed Fare
Ordinary Stage Carriage	Up to 4 Kms: ₹ 5/-	Up to 10 Kms: ₹ 10/-
	From 4 to 10 Kms: ₹ 10/-	Above 10 Kms: ₹ 20/-
	Above 10 Kms: ₹ 15/-	
AC-Stage Carriage	Up to 4 Kms: ₹ 10/-	Up to 4 Kms: ₹ 10/-
	From 4 to 8 Kms: ₹ 15/-	From 4 to 12 Kms: ₹ 20/-
	From 8 to 12 Kms: ₹ 20/-	Above 12 Kms: ₹ 30/-
	Above 12 Kms: ₹ 25/-	

However, the Corporation did not accept (December 2016) the proposed fare hike as it wanted other factors such as CNG Cost and CPI Index also to be considered. Revision of the fare structure as per the proposed fare hike would have increased the revenue of the Corporation by about ₹ 170 crore[4] per year, assuming in both cases the ridership remained at present level.

The Corporation thereafter submitted (December 2016) the proposal to the Department that as the fare was not increased since November, 2009, there were other costs also to be considered while deciding the revised fare such as increase in CNG price by 85.83 *per cent* from 2009 to 2016[5]. The Corporation proposed

[4] As per the calculation done by the Corporation for the year 2015-16 considering the average sale of 4.50 crore tickets per month for AC and Non-AC buses.

[5] ₹ 36.85/kg in July 2016 and ₹ 19.83/Kg in November 2009

to increase the fare of Non-AC buses and AC buses by 65 *per cent* and by 71 *per cent* respectively. However, no decision was conveyed by the Department in this regard although the Corporation took up this matter with the Department several times till December 2022.

Thus, the Corporation was neither able to get approval of the GNCTD for increase in fares nor did it avail benefit of the proposed increase in fares to meet the cost of Service Tax/GST paid of ₹ 56.29 crore[6] (June 2016 to March 2022) on AC buses.

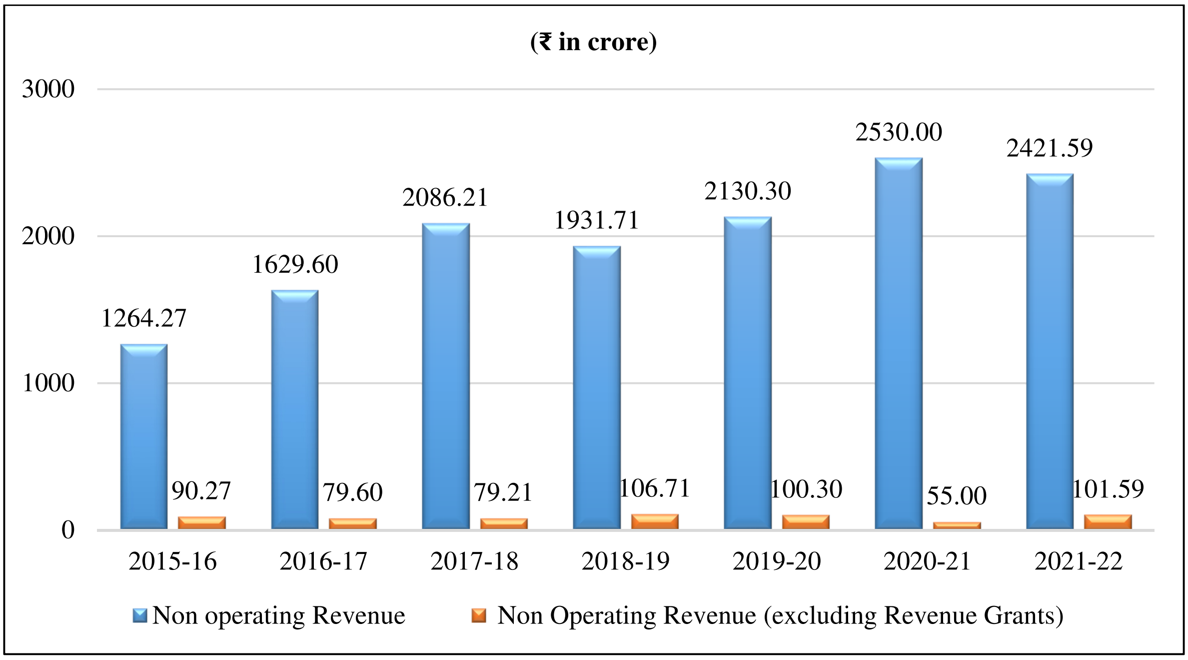
The Management stated (May 2023) that the fare revision is a policy matter of the Department. Unless, the Department approves the same, the Corporation cannot implement the fare revision. Fact remains that the Corporation did not accept the proposed revised fares as suggested by GNCTD and lost the opportunity to avail the benefit of about ₹ 170 crore per year.

2.2.5 Non-Operating Revenue

2.2.5.1 Position of Non-Operating Revenue of the Corporation

The Corporation earned Non-Operating Revenue (other than from operation of buses) mainly from Grants received from GNCTD, Interest income on unutilised Capital/Plan funds, Interest on Short Term Deposits, Income from Advertisement Contracts, Sale of scrap vehicles, Penalties and other miscellaneous Receipts. The details of Non-Operating Revenue earned by the Corporation during 2015-16 to 2021-22 are depicted in **Chart 2.6**.

Chart 2.6: Non-Operating Revenue



Source: Annual Accounts of the Corporation

[6] Calculated by the Corporation on the basis of income from AC buses and the applicable rate of Service Tax/GST

It may be seen from above chart that the Non-Operating Revenue ranged between ₹ 1,264.27 crore and ₹ 2,530.00 crore. It included Revenue Grants received from GNCTD of ₹ 1,174.00 crore (2015-16) and ₹ 2,475.00 crore (2020-21). The Corporation was required to find other sources of Non-traffic Revenue for improving its revenue viz. realisation of rent from assets, advertisement on buses, commercial utilisation of spaces in depots, etc. The shortcomings noticed in recovery of outstanding Non traffic Revenue and augmenting other sources of revenue are discussed in the subsequent paragraphs.

2.2.5.2 Outstanding dues not paid by the Transport Department

(i) The Corporation transferred 3.18 lakh square meters (sqms) of space at twelve Depots and one Bus Terminal to the Department up to March 2022 for Operation/Parking of Cluster Buses. However, neither any Rent Agreement nor any assurance for payment of rent was obtained from the Department.

The Corporation had been regularly raising bills on the Department for Rent, Service Tax and Water Charges for the above space. The outstanding amount had accumulated to ₹ 225.31 crore up to 31 March 2022. However, neither the amount was realized nor of any assurance was obtained from the Department. It is pertinent to mention that Department had realised rent for these spaces from Concessionaires of Cluster buses as per the agreement between Concessionaires and the Department but did not pass on it to the Corporation.

Further, being the owner of the properties, which were used by Cluster buses, the Corporation paid Property Tax and Ground Rent amounting to ₹ 6.26 crore for the period 2015-16 to 2021-22 which also remained unpaid by the Department.

The Management accepted (May 2023) the Audit Observation and stated that matter is being followed up with the Department.

(ii) The Corporation provided 35 to 41 Tavera vehicles to the Department, for deployment in the Enforcement wing at State Transport Authority from January 2010. As of March 2022, amount of ₹ 7.82 crore was recoverable from the Department for hiring out these vehicles. Out of this, the Department had paid ₹ 3.20 crore and ₹ 4.62 crore was outstanding as of December 2022.

The Management accepted (May 2023) the Audit Observation and stated that matter is being followed up with the Department.

Recommendation 2.2:

- ***The Corporation should vigorously pursue the matter with the Department for recovery of old dues.***
- ***The Department should ensure timely payment of dues of the Corporation.***

2.2.5.3 Outstanding amount of ₹ 21.29 crore not recovered from DTIDCL

The GNCTD directed (16 August 2012) to the Corporation that, henceforth, the construction and maintenance of all Bus Queue Shelters (BQSs) in NCT of Delhi shall be carried out by Delhi Transport Infrastructure Development Corporation Limited (DTIDCL). Accordingly, the Corporation transferred 884 BQSs to DTIDCL by 2015-16. However, the order was silent on payment to be made by DTIDCL against the cost of these BQS.

The Corporation had raised (August 2015) a demand of ₹ 21.29 crore against the cost of construction and Project Management Consultancy (PMC) charges of 156 BQSs on DTIDCL which was not paid as of December 2022. However, it was observed that the Corporation raised claim for original cost of construction of BQS instead of depreciated value of ₹ 7.33 crore on the date of transfer. The Corporation instead of escalating the matter with the Department for resolving with DTIDCL keeps on corresponding with DTIDCL without any result.

The Management accepted (May 2023) the Audit Observation and further replied that it had already taken up the matter with DTIDCL and Transport Department.

2.2.5.4 Avoidable expenditure of ₹ 16.51 crore due to not transferring of Arbitration Case to DTIDCL

As per point No. 6 of GNCTD Order dated 16 August 2012 regarding transfer of BQS to DTIDCL, it has been specified that all the Court Cases related to construction and maintenance of BQSs shall be directly dealt with by the DTIDCL.

At the time of transferring the BQSs, a dispute between the Corporation and M/s Green Delhi BQS Limited (Agency) was under Arbitration. M/s Green Delhi was awarded a contract for construction of 248 BQSs on Build, Operate and Transfer basis in 2007. The Contract was later terminated (8 March 2011) by the Corporation citing breach of contract. The Agency went into Arbitration claiming construction cost of BQSs of ₹ 50.26 crore which was responded to by the Corporation by claiming pending License Fee of ₹ 33.75 crore from the Agency. Although, these BQSs were transferred to DTIDCL before 2015-16, but Arbitration Case was not transferred to DTIDCL and the Corporation continued to fight the case on its own. After considering the claims of both parties, the Arbitrator awarded (01 July 2019) a net amount of ₹ 16.51 crore (₹ 50.26 crore less ₹ 33.75 crore) payable to the Agency by the Corporation. Again, instead of transferring this liability to DTIDCL, which was against construction cost of BQSs, the Corporation approached the Hon'ble Delhi High Court against the award. The Corporation also deposited (3 February 2020) the Arbitral Award amount of ₹ 16.51 crore with the Court, which could have been paid by the DTIDCL, had the arbitral case been transferred to it timely. The

Corporation belatedly realised (January 2020) that liability in this case relates to DTIDCL and raised claim for the same. DTIDCL had not paid ₹ 16.51 crore so far (December 2022).

Thus, failure of the Corporation in following the Orders of the Government resulted in avoidable expenditure of ₹ 16.51 crore.

The Management accepted (May 2023) the Audit Observation and further stated that the matter had been taken up with DTIDCL for remitting ₹ 16.51 crore.

Recommendation 2.3: The Corporation should pursue the matter of recovery of dues and Arbitral Award amount with DTIDCL. The Corporation may take steps to transfer the legal case to DTIDCL.

2.2.5.5 Failure to augment Non-Traffic Revenue

Since the Corporation was incurring losses continuously, augmenting revenue from sources other than operations assumes considerable importance. However, Audit observed various instances where the Corporation lost opportunity to earn additional revenue through advertisements, commercial utilisation of spaces at depots, etc., as discussed in the subsequent paragraphs.

i) Contracts for Advertisements on Unipoles not finalised

As per Delhi Outdoor Advertisement Policy 2017, before displaying of any outdoor advertisement in Delhi, permission should be obtained from Municipal Corporation of Delhi. In pursuance of the same, the Corporation had got permission from North and East Delhi Municipal Corporations (NDMC & EDMC). Tenders for advertising on unipoles were floated five times between October 2016 and February 2021 but all these were cancelled due to receipt of only single bid or no bids in NDMC and EDMC areas. In this regard, Committee for revision of Reserve Price constituted (August 2016) observed that Reserve Prices fixed were on higher side. Further, views of the Advertising Agencies sought (October 2018) by the Corporation had, inter-alia, suggested adopting Revenue sharing model. However, the Corporation did not accept these suggestions.

No tenders were floated for South DMC (SDMC) areas as no permission was obtained or MOU was signed. Failure of the Corporation in finalising Advertisement Contracts for Unipoles in NDMC and EDMC resulted in loss of opportunity to earn Revenue.

Further, vigorous efforts at higher level were not made for obtaining permission of SDMC. It was finally obtained after the meeting (February 2019) of MD with Commissioner SDMC and MoU with SDMC was signed in August 2020. As per the MoU, tenders for unipoles in SDMC area were to be floated by SDMC but no tenders were floated by it. Further, tenders were floated for unipoles in other areas, however, no tenders were awarded. Besides, Management did not consider to engage any media consultant for improving revenue generation through advertisement.

The Management stated (May 2023) that tenders were not finalised due to poor response in East and North DMC areas. Further, the SDMC did not permit / allow the Corporation to tender on bus body wraps and on Unipoles despite regular correspondence. Finally, MoU was signed with SDMC on 17 August 2020.

The reply of the Management as regards poor response of bidders is not acceptable as the Corporation did not take any action on revision of Reserve Price to make Tender more attractive. Further, no other way out was explored. As regards obtaining permission from SDMC, it was obtained after considerable delay.

ii) Failure in realising Revenue for advertising through Bus Body Wraps as per Agreement

The Corporation awarded (December 2018) Contract for advertisement through Bus Body Wrap (BBW) on buses of 13 Depots falling in NDMC and EDMC areas for a period of five years and as per agreement the contract price was to enhance 10 *per cent* annually. Further, Contract for advertisement through BBW for 972 AC buses of 21 depots was awarded (January 2021) to M/s Assam Government Marketing Corporation Limited. As per the above Contracts, the billing of Monthly Licence Fee was to be based on 90 *per cent* of the fleet/buses held by the Depots. However, Audit observed that the Corporation, against the receivable amount of ₹ 98.41 lakh, recovered ₹ 73.57 lakh resulting in short realization of the Revenue by ₹ 24.84 lakh during the period from March 2020 to March 2022.

The Management stated (May 2023) that 36 buses were transferred to other Depots, rebate of three months was allowed during Covid period and 234 buses were under contract with other advertisers. The factors outlined in the reply by the Management were considered by Audit while arriving at the short recovery of ₹ 24.84 lakh.

Considering total fleet of AC and Non-AC buses available for BBW in all three areas viz. NDMC, EDMC and SDMC excluding the buses for which contracts for advertisement were entered into, the Corporation also lost the opportunity to earn Revenue of ₹ 40.57 crore[7] from 2015-16 to 2021-22 (till December 2022) on advertisement through BBW due to delay in signing MoU with SDMC and non-execution of contracts in NDMC and EDMC areas.

[7] The potential loss of revenue was worked out by Audit based on rates at which the contract was awarded for Depots in SDMC area, which was later cancelled as permission could not be obtained.

iii) Failure to finalise proposal for installation of LED screens in Buses

The Corporation planned to install LED screens in buses to tap advertisement Revenue through it. However, proposal for installation of LED screens in Buses did not materialise due to indecision on the part of the Corporation which deprived the Corporation of additional Non-Operational Revenue.

The Management in its reply (May 2023) has not addressed this issue.

iv) Failure to augment Revenue through Commercial use of Depots, etc.

The Report of the C&AG of India for the year ending March 2015 highlighted failure of the Corporation in exploring various options for commercial use of Depots. The Corporation stated in the Action Taken Note that the work of development of Multilevel Parking at Depots/Terminals, etc., was assigned to Public Works Department (PWD) in September 2015. However, no significant progress was observed in exploring options for Commercial use of Depots as discussed below:

- The Corporation approved (January 2013) a proposal for engaging Delhi Tourism and Transportation Development Corporation Limited (DTTDC), to construct Multilevel Parking, Budget Hotel, etc. in six Depots/Terminals and an MoU was signed with DTTDC (September 2013). However, no substantial progress was made by DTTDC in accordance with the MoU. Later, the Corporation assigned the same work to PWD, however, it also could not start the work due to issues related to conversion of Leasehold land to Freehold land with DDA, etc. (2017). The Corporation subsequently engaged National Building Construction Corporation (NBCC) and MoU was signed (27 October 2020) for development of land parcels of the Corporation. However, as of December 2022, no significant progress was made.

  The Management stated (May 2023) that NBCC was engaged for the project of redevelopment of land parcel for Commercial use.

  Fact remains that considerable time was taken in engaging the Construction Agency since 2013 and work was still at initial stage as of May 2023.

- Similarly, Government approved (April 2010) redevelopment of Office Complex of the Indraprastha (IP) Depot and construction of a Multi storied Complex at IP Depot/HQ by Delhi State Industrial and Infrastructure Development Corporation Limited (DSIIDC) in order to generate Revenue through Rent on extra developed area. The proposal was approved (December 2011) by the Board and funds for the project were to be arranged by DSIIDC by leasing out the developed space to the Corporation and Government Departments. However, work on the project was not started. Land and Development Office (L&DO), Ministry of Urban and Housing Affairs, GoI, before giving NOC for the project, issued (November 2016) a demand notice amounting to ₹ 1.41 crore towards damage charges for the unauthorized construction done by the Corporation during the period from 16 January 1992 to 14 January 2015. The Corporation paid (November 2017) damage charges of ₹ 1.41 crore to L&DO.

Later, in December 2020, DSIIDC submitted a draft MoU for redevelopment of Office Complexes and Parking Areas as per Master Plan of Delhi (MPD) 2021 from its own funds, with DSIIDC and the Corporation sharing developed area in 40:60 ratio. However, the draft MoU was not signed as of May 2023.

The Management stated (May 2023) that the MoU to be signed between DTC and DSIIDC had been at final stage for re-development of Office Complex at I.P. Depot.

However, fact remains that the Corporation delayed the starting of the Project despite approval (December 2011) by the Board for construction of a Multi-storied Complex at IP Depot to earn additional Revenue. No progress had been made as of May 2023.

These projects would have benefited the Corporation by (i) generation of additional Revenue (ii) increase in bus parking space through Multi-level Bus Parking and (iii) modernisation of the Corporation Depots/Terminals. Failure of the Corporation in utilising available land for Commercial use deprived it of the possible additional Revenue.

Recommendation 2.4:

The Corporation should:

- ***maximise its potential to generate Revenue through Unipoles, Bus Body Wrap Contract and installation of LED in buses by adopting proactive approach at the highest level and minimise the delay in finalization of Tenders;***
- ***make all out efforts to complete pending projects so that its Revenue could be augmented by Commercial use of land; and***
- ***also consider appointing an expert/consultant for exploring new avenues of Advertisement Revenue.***

2.3 Other Financial matters

2.3.1 Delay in depositing PF contribution

Corporation has formed Employees Provident Fund Trust (Trust) under Employees Provident Fund Act, 1952 (EPF Act). As per section 7Q of the EPF Act, the Provident Fund contribution deducted from the salary of Employee along with Employer's contribution is to be deposited with the Trust by 15th of the next month and failure to pay the dues within due date attracts payment of Interest at the rate of 12 *per cent* per annum.

Audit observed that there were considerable delays in depositing the PF contribution of Employees and its own contribution with Trust ranging from 1 day to 37 days during the period 2015-16 to 2021-22 for which the Corporation made itself liable for payment of Interest amounting to ₹ 1.79 crore. As against an amount of ₹ 1.79 crore, the Corporation had paid ₹ 25.95 lakh as Interest till December 2022 and ₹ 1.27 crore remained outstanding.

The Management accepted (May 2023) the Audit Observation and stated that delay was mainly due to shortage of funds as Grants-in-Aid from the Department was not received and it further assured for corrective action by timely deposit of the Statutory Dues.

Recommendation 2.5: The Corporation should timely deposit the Statutory Dues in order to avoid any subsequent extra Interest burden/Penalty.

2.3.2 Levy of Interest and Penalty of ₹ 63.10 crore due to availing of ineligible Input Tax Credit (ITC) for Goods and Services Tax (GST)

The Corporation received (July 2021) a summon from the Director General of GST Intelligence, Chandigarh to appear in a hearing regarding availing of ITC by it on exempted services, i.e., earning from Non-AC buses and common services such as hiring charges of staff cars, purchase of batteries, tyres and tubes, repair, etc.

The Corporation had availed of ITC amounting to ₹ 224.34 crore during 2017-18 to 2021-22 on earnings of AC/Non-AC/Hiring of buses and common services against eligibility for ₹ 39.41 crore. Out of the total ineligible ITC claimed/availed of ₹ 184.93 crore, claims of ₹ 132.33 crore were withdrawn (₹ 55 crore on September 2021, ₹ 24.73 crore in October 2021 and ₹ 52.60 crore in August 2022) and ₹ 38.47 crore was paid in April 2022. In May 2022, GST Department directed the Corporation to pay the balance ITC availed of ₹ 14.13 crore and also levied Interest and Penalty of ₹ 82.18 crore (Interest of ₹ 56.56 crore and Penalty of ₹ 25.62 crore) for wrongly availing of ineligible ITC. Thus, availing ineligible ITC by the Corporation resulted in avoidable liability of Interest and Penalty amounting to ₹ 82.18 crore which was not paid so far (December 2022) and matter was pending with the GST Department.

The Management stated (May 2023) that the GST department has forwarded (March 2023) the revised demand of ₹ 37.48 crore against Interest calculated on the reversal amount of GST and the GST payment on the other commodities. However, on cross checking, the final Interest worked out to ₹ 32.22 crore by the Corporation and the same was paid to GST Department on 15 May 2023. It further stated (August 2024) that an amount of ₹ 4.20 crore was also paid to GST Department after re-examination of the balance ITC of ₹ 14.13 crore.

The fact remains that, considering the revised demand of interest of ₹ 37.48 crore forwarded by GST Department and payment of ₹ 32.22 crore there against, the Corporation was liable to pay ₹ 30.88 crore (penalty: ₹ 25.62 crore and balance interest of ₹ 5.26 crore) to GST Department.

Chapter 3

Operational Performance

Chapter 3: Operational Performance

The Corporation, for ensuring efficient and satisfactory public transport, was required to have at least a fleet of 5,500 buses based on directions of Hon'ble High Court. At the end of March 2023, the Corporation was having merely a fleet of 3,937 buses which included 1,770 overage buses. The Corporation could not achieve Operational efficiency as compared to All India Average in respect of fleet utilisation and vehicle productivity. Route planning was deficient. Scheduled KMs were missed. Breakdowns ranged between 2.90 and 4.57 per 10,000 KMs of Operations which was too high as compared to other State Transport Undertakings (STUs) and Cluster Buses. Cluster Buses performance was much better than that of the Corporation in almost every Operational Parameter even though both were performing in similar circumstances.

3.1 Introduction

In order to comply with the directions of Hon'ble High Court (September 2007) of augmenting the city bus fleet to 11,000 buses, GNCTD came up with a new scheme which envisaged concurrent operation of buses of the Corporation and Private operators in 'Cluster' (May 2011) under a Unified Time Table. Each Cluster was to be part of a network, for providing Stage Carriage Services in Delhi through Corporation and DIMTS (Cluster) buses in equal ratio on each route (5,500 by the Corporation and 5,500 Cluster Buses). The Corporation had fleet of 3,762 buses as on 31 March 2022 and held average fleet of 3760 buses during 2021-22, out of which 3206 (85.27 *per cent)*[1] were being utilized while there was a fleet of 3,239 Cluster Buses and average fleet of 2837 buses, out of which 2,809 buses (99.01 *per cent*) were on road during 2021-22. The Corporation Buses operated on 468 routes, ferrying a total of 57 crore passengers, and covering 2,354.74 lakh KMs during 2021-22. The Operational Performance of the Corporation for the last seven years ending March 2022 is given in **Annexure 3.1**.

An analysis of the Operational Performance of the Corporation is discussed in the succeeding Paragraphs.

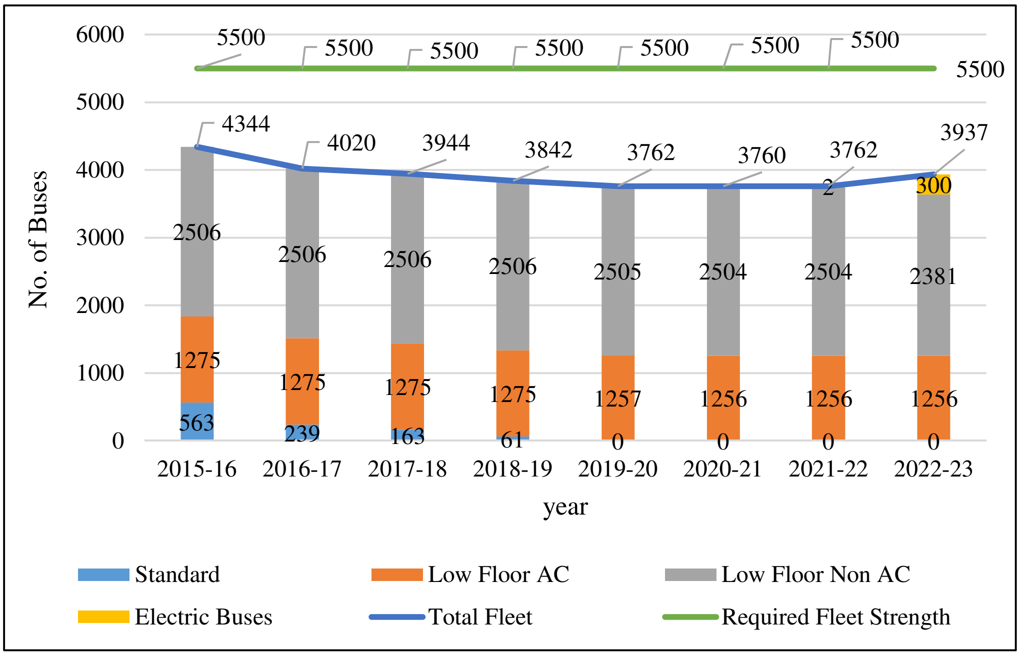
3.2 Audit observations

3.2.1 Fleet strength and Age profile

For ensuring efficient and satisfactory Public Transport, the Corporation was required to have at least a fleet of 5,500 buses[2]. However, during 2015-16 to 2021-22, the Corporation was not maintaining adequate number of buses as shown in **Chart 3.1**.

[1] Fleet Utilisation ranged between 76.95 *per cent* and 85.27 *per cent* during COVID period.
[2] Directions of Delhi High Court dated September 2007.

Chart 3.1: Fleet Strength of the Corporation



Source: Operational statistics of the Corporation.
Note: The Corporation had two Electric Buses also in 2021-22.

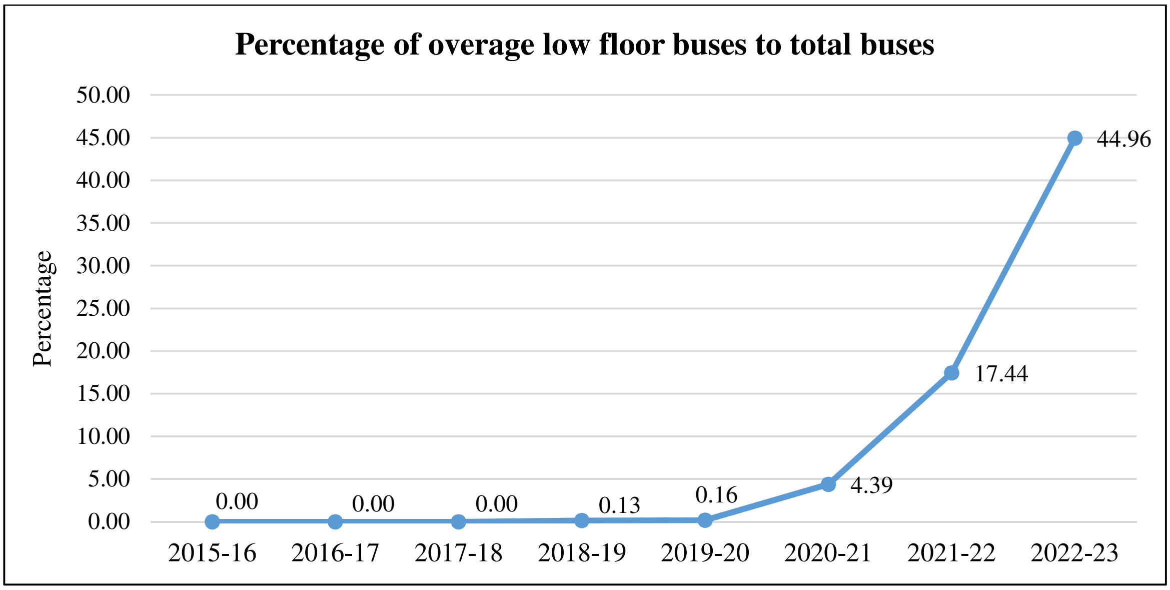
It may be seen from the above chart that the Corporation was not having adequate number of buses in all the years (2015-16 to 2021-22) hence, it was necessary to procure new buses for augmenting the existing fleet as well as for replacing the old and un-serviceable buses. Audit observed that ₹ 236.82 crore was available for procurement of buses in 2015 and ₹ 233.06 crore was available for this purpose as of March 2022. However, the Corporation failed to induct new buses (except two Electric Buses in March 2022[3] and 298 buses after March 2022 up to November 2022) into its fleet during the last 10 years (last bus was inducted in 2011-12). Further, number of buses remained same during the review period excluding Standard Floor Buses which were completely phased out in 2019-20. The issue of Procurement of buses has been discussed in Chapter 4.

The Transport Department accorded (August 2012) approval that the Corporation CNG buses having Stage Carrier Permits as well as Contract Carriage Permits may be plied within NCT of Delhi up to 15 years of age. As per norms (February 2015) prescribed by the Corporation, the life of a Low Floor AC/Non-AC Bus was 12 years or 7.50 lakh kilometers of operation, whichever was later. The Board approved (February 2015) that in specific cases

[3] Corporation entered in engagement of 300 e-buses under CAPEX Model of FAME-II scheme of Department of Heavy Industries, GoI. Under the Scheme, MHI contributed ₹ 55 lakh per bus as subsidy to Vendors which was to be routed through DTC. The Corporation has to pay the Vendor at the rate of ₹ 68.58 per KM for operating the buses. Hence, no upfront payment was to be made by the Corporation and the corpus of ₹ 233.06 crore remained unutilized. Out of these 300 e-buses scheduled to be delivered (by November 2021: 100 buses and January 2022: 200 buses), only 2 buses were received till March 2022 and remaining were received till November 2022.

where the bus remains held up for long time due to unavoidable reasons and is unable to complete 7.5 lakh KMs of operation up to 15 years, then the vehicle may be scrapped after 15 years of life with the approval of CMD upon the merit of each case. Percentage of Low Floor Buses which had completed their useful life (as prescribed by the Corporation) for the period from 2015-16 to 2022-23 is detailed in **Annexure 3.2** and summarised in **Chart 3.2**.

Chart 3.2: Percentage of overage Low Floor Buses



Source: Operational statistics of the Corporation.

As could be seen from Chart 3.2, the number of overage low floor buses in the Corporation fleet during 2018-23 increased from 0.13 *per cent* (five buses in 2018-19) to 44.96 *per cent* (1,770 buses in 2022-23). The percentage of overage buses of the Corporation was higher in comparison to APSRTC[4] (one *per cent)* and BESTU[5] which did not have any overage bus in its fleet. The increase in the number of overage buses was due to the inability of the Corporation to purchase new buses and scrap the overage buses in a timely manner as discussed in subsequent paras.

The Management accepted (May 2023) the fact and stated that as only 300 new buses could be procured, these overage buses could not be scrapped/deleted from the Corporation's fleet. Currently, Corporation has 3,937 buses (3,637 CNG and 300 Electric buses). The fact remains that as on 31 March 2023, 1,770 Low Floor CNG Buses (44.96 *per cent*) were overaged and being operated beyond 12 years useful life[6] prescribed (February 2015) by the Corporation.

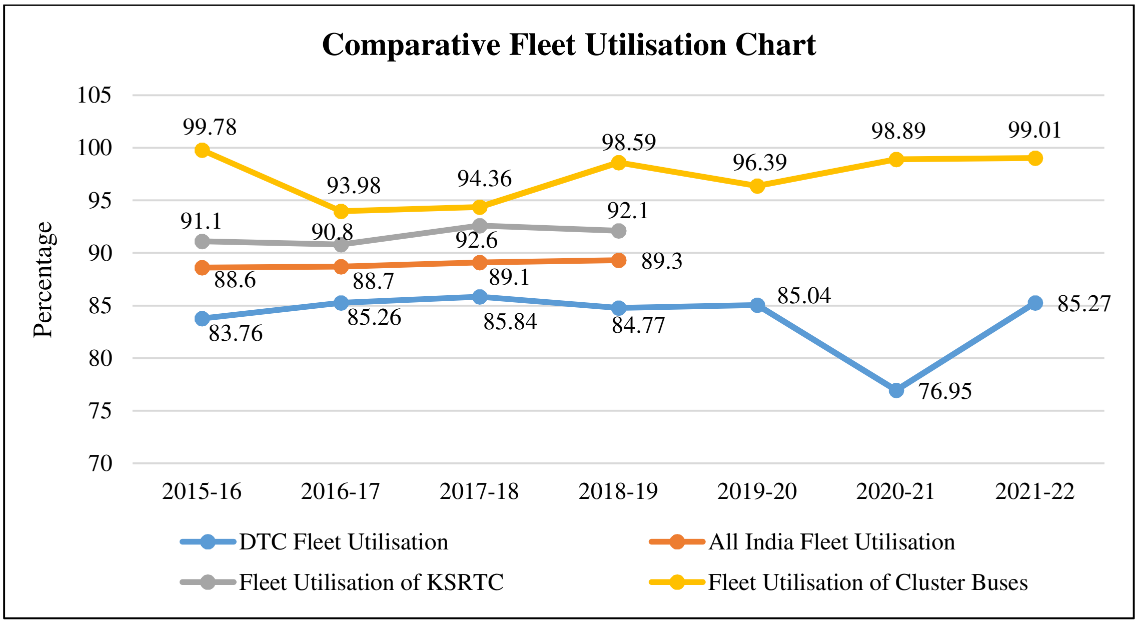
4 Andhra Pradesh State Road Transport Corporation
5 Brihanmumbai Electric Supply and Transport Undertaking
6 Six buses beyond 15 years

3.2.2 Fleet Utilisation

Fleet Utilisation represents the Ratio of the number of buses on road to the fleet held by the Corporation. Optimum fleet utilisation is necessary for enhancing the Operational Performance of a transport undertaking. Inability to achieve optimum fleet utilisation would impact the Corporation's Operational Performance adversely.

The Corporation maintained a mixed fleet till 2019-20 of Standard floor and Low floor buses and had only low floor buses since 2020-21 in its fleet. As per the Annual Maintenance Contract (AMC) for low floor buses, the Contractors were required to ensure 95 *per cent* availability during warranty period i.e. for a period of three years or operation of the bus up to 2.10 lakh KMs, whichever is later and 92 *per cent* availability after the warranty period. However, the Contractor failed to ensure 92 *per cent* availability of low floor buses on road during the entire period of 2015-22 as shown in **Chart 3.3**. As per the provision of AMC, the Corporation deducted penalty of ₹ 21.57 crore from the bills paid to the contractors during the period 2015-22.

Chart 3.3: Fleet Utilisation of Corporation buses vis-à-vis others



Source: Operational statistics of the Corporation, CIRT data and Transport department data.

The fleet utilisation computed by the Corporation also does not depict the correct picture as it was being computed on the basis of buses out shed[7] in the morning shift only without taking into account the buses out shed in the evening shift.

It can be seen from chart 3.3 that trend of fleet utilisation by the Corporation was below All India Level (2015-16 to 2018-19), KSRTC[8] (which was the best performer in fleet utilisation among all the STUs) and Cluster buses. The low

[7] When the bus with driver and conductor exits the depot it is considered as out shed.
[8] KSRTC- Karnataka State Road Transport Corporation

fleet utilisation was primarily attributable to frequent breakdowns as discussed in paragraph 3.2.3 and existence of 1,770 overage buses **(Annexure 3.2)** as on 31 March 2023.

Thus, the Corporation was unable to achieve optimum utilisation of its fleet, which in turn, impacted its operational performance adversely.

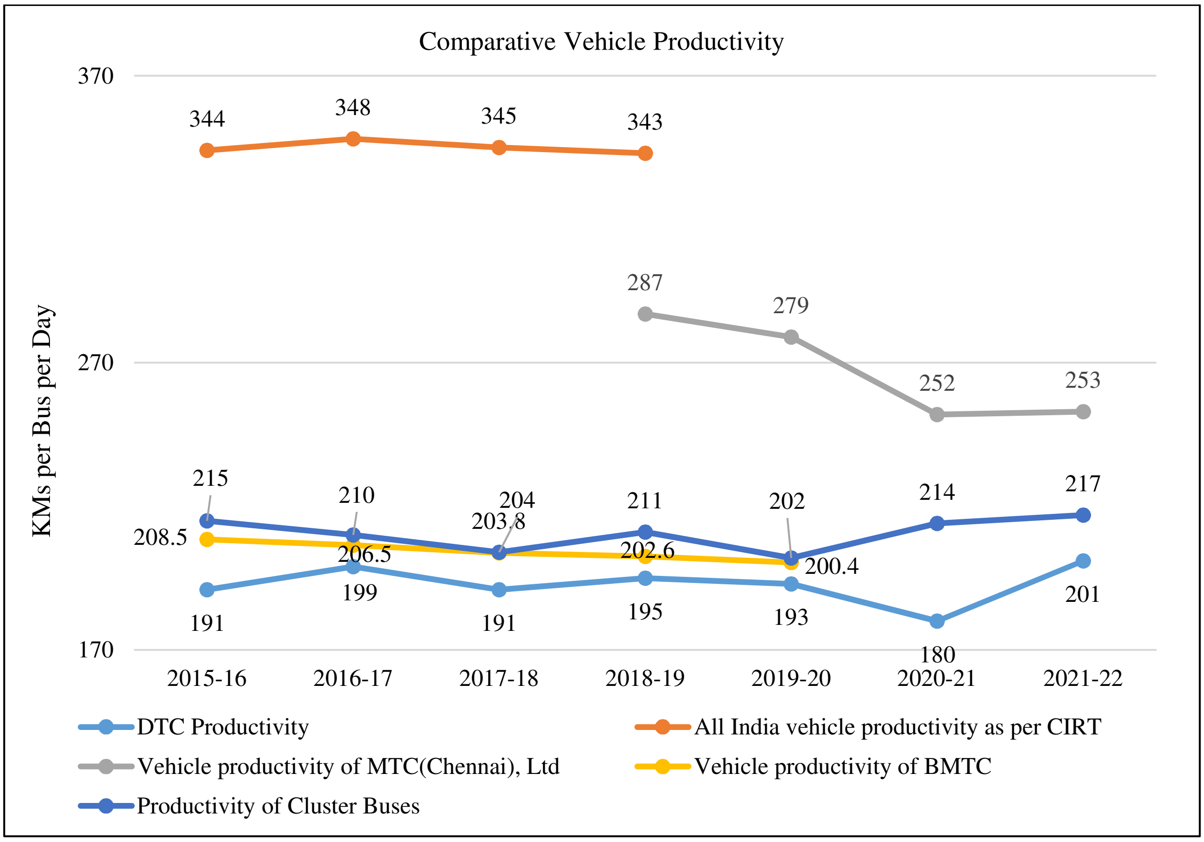
The issue was also highlighted in Paragraph 2.2.3.2 of the previous Performance Audit Report featured in the Report of the CAG on Revenue and Social & Economic Sectors (PSUs) for the year ended March 2015, Government of National Capital Territory of Delhi, (Report No.1 of the year 2016). However, no corrective measures had been taken to enhance the fleet utilisation.

Recommendation 3.1: The Corporation needs to procure new buses, scrap overage buses and take up the matter with the AMC Contractor to ensure 92 per cent availability of all the buses for operations to increase Fleet Utilisation.

3.2.3 Vehicle Productivity

Vehicle Productivity refers to the average kilometers run by each bus per day in a year. The detailed figures of Vehicle Productivity of the Corporation vis-à-vis the targets fixed during 2015-22 is shown in the **Annexure 3.3**. A summary of the same is also given in **Chart 3.4**.

Chart 3.4: Productivity



Source: Operational statistics of the Corporation, CIRT data and Transport Department data.

The All India Average Vehicle Productivity per bus per day was 343 KMs to 348 KMs during 2015-16 to 2018-19 (as per available data), whereas for the Corporation, it ranged from 180 KMs to 201 KMs during 2015-22. Vehicle Productivity of the Corporation was less than Vehicle Productivity of other Metropolitan Cities having higher percentage of over-aged fleet viz. Metropolitan Transport Corporation (MTC) (Chennai) Limited (252 to 287 per bus/KM/day) or Bengaluru Metropolitan Transport Corporation (200.4 to 208.5 per bus/KM/day), although these Corporations were operating in similar crowded city road conditions. Audit further observed that breakdowns of both Standard Floor Buses and Low Floor Buses were very high, as shown in **Table 3.1**, which also adversely affected the Vehicle Productivity.

The **Table 3.1** shows summary of breakdown of buses per 10,000 KMs during the period of seven years ending March 2022.

Table 3.1: Breakdown per 10,000 KMs

(In numbers)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Std. Floor Buses	4.63	2.67	4.58	4.75	NA	NA	NA
Non AC Low Floor Buses	4.15	4.84	4.90	4.64	5.21	3.18	4.22
AC Low Floor Buses	2.83	3.47	3.68	3.63	4.24	2.75	3.89
DTC as a Whole	4.50	3.83	4.08	3.96	4.57	2.90	4.01
Breakdown in BMTC	0.06	0.06	0.05	0.03	0.03	0.01	NA
Breakdown in MTC (Chennai)	NA	NA	NA	0.001	0.001	0.004	0.002
Breakdown in BESTU	0.57	0.39	0.33	NA	NA	NA	NA
Cluster buses	0.01	0.01	0.02	0.03	0.01	0.01	0.02

Source: Corporation data and Annual Repot of BMTC, MTC (Chennai) and BESTU. NA- not available.

The Table 3.1 shows that rate of breakdown per 10,000 KMs had fluctuated year after year. It ranged between 2.90 and 4.57 during the period of seven years ending March 2022, whereas it was 0.01 to 0.06 in case of Bangalore Metropolitan Transport Corporation, 0.001 to 0.004 in case of Metropolitan Transport Corporation (Chennai) Limited, 0.33 to 0.57 in case of the Brihanmumbai Electric Supply & Transport Undertaking (BESTU) and 0.01 to 0.03 in respect of Cluster Buses during the period of 2015-16 to 2021-22.

Further, average of four breakdowns per 10,000 KMs in respect of Corporation buses indicate that a bus breaks down in every 12 days whereas average of 0.02 breakdowns per 10,000 KM of Cluster Buses indicates that a bus breaks down only once in every 2,300 days.

Audit observed that breakdowns in respect of Low Floor Buses increased at an alarming rate. In respect of Low Floor non-AC Buses, it increased by 25.54 *per cent* between 2015-16 and 2019-20 and in respect of AC Low Floor Buses it increased by 49.82 *per cent* during the same period, then it reduced slightly in 2021-22 whereas in respect of over aged Standard Buses, it increased by 77.90 *per cent* between 2016-17 and 2018-19 and these buses were phased out in 2019-20. As all the Low Floor Buses are more than 10 years old, there was continuous increase in number of breakdowns. Moreover, the quality of

Repair and Maintenance by the Contractors under Annual Maintenance Contracts was also poor thereby adversely affecting the Vehicle Productivity and reliability of the bus service.

Due to low Vehicle Productivity, the Corporation failed to achieve even its own set targets as given in **Annexure 3.3** during 2015-22, resulting in loss of potential Revenue of ₹ 68.40 crore.

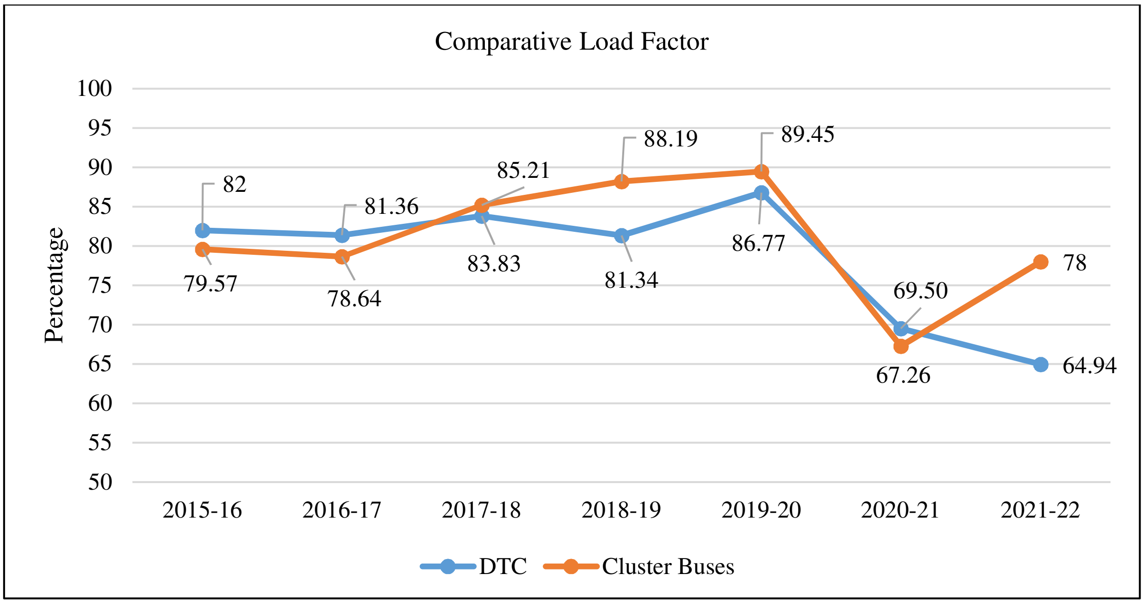
The Management stated (May 2023) that the reasons for low Vehicle Productivity were overaged buses, frequent traffic jams and route diversions in Delhi resulting in increased operating time and reduced operational kilometers. However, the fact remains that Cluster Buses, MTC and BMTC which were operating in the similar/comparable conditions had higher Vehicle Productivity.

Recommendation 3.2: The Corporation should increase Vehicle Productivity by ensuring roadworthiness of buses through timely preventive maintenance.

3.2.4 Load Factor

Capacity utilisation of a Transport undertaking is measured in terms of Load factor, which represents the percentage of seating capacity occupied to seating capacity offered. The schedules to be operated are to be decided after proper study of routes and periodical reviews are necessary to improve the Load factor. The Corporation reported Load factor in the range of 64.94 *per cent* to 86.77 *per cent* during 2015-16 to 2021-22 **(Annexure 3.4)**. A graph depicting the Corporation's Load factor vis-à-vis Cluster buses is given in **Chart 3.5**.

Chart 3.5: Comparative Load Factor



Source: Operational statistics of the Corporation and Transport department data.

Operation wise (City and National Capital Region) Load factor of the Corporation is detailed in **Annexure 3.4**. It can be seen that the load factor in NCR routes remained low at 28.55 to 60.91 *per cent* and in City routes, the same ranged from 37.93 to 89.62 *per cent* during 2015-16 to 2020-21. In light of the varying load factors in the NCR and City routes, DTC need to re-strategize the distribution of buses to optimize its revenue within the ambit of its social commitment.

The Corporation computes load factor based on total Operating Revenue including Revenue from Passes, special hire and school buses as compared to the CIRT Pune formula where the load factor is computed based on only ticketed Revenue. The load factor so calculated appears to be on much higher side. Thus, load factor arrived at by Corporation does not depict a correct and realistic picture.

Recommendation 3.3: The Corporation needs to undertake periodic review of load factor and re-strategise the distribution of buses to optimise the revenue within the ambit of its social commitment.

3.2.5 Route Planning and Rationalisation

As stipulated in Section 22 of the Road Transport Corporation Act, 1950, it shall be the general principle to carrying on the Corporations' operations on Business principles. Operational Performance of a State Transport Corporation can be improved by periodic review of uneconomical routes with a view to assess their continuance, to rationalise them and to optimise operation of buses on higher Revenue earning routes. Scrutiny of records of the Corporation revealed the following deficiencies in this regard:

3.2.5.1 Operation of buses not in line with Business principles

As on 31 March 2022, 657 routes were approved by the Department for operation of buses in Delhi of which the Corporation operated only on 311 routes. In addition to these 311 routes, 157 other routes were also operated by Corporation on public demand. Thus, the Corporation was operating on 468 routes (57 *per cent*) out of total 814 routes as on 31 March 2022. Analysis of the Earning per KM (EPK) and Operating cost per KM of operations in respect of 403 routes operated during 2021-22, revealed that the Corporation was unable to recover its Operational Cost in any of the routes operated by it. The Operational Loss to the Corporation during 2015-22 was ₹ 14,198.86 crore[9] which was met to a great extent from Revenue Grant of ₹ 13,381 crore from GNCTD and other Non-Operating Revenue of ₹ 612.68 crore. This reflects that the Corporation was dependent upon GNCTD for its survival and not operating on Business principles.

The Management stated (May 2023) that it did not operate all 657 routes approved by Delhi Government due to shortage of buses and increased Metro lines. Further, the Corporation had also stopped plying its buses on various routes where Cluster Buses were also being operated and the fare of the

[9] 2015-16- ₹ 1,483.80 crore, 2016-17-₹ 1,610.80 crore, 2017-18-₹ 1,960.40 crore, 2018-19-₹ 1,914.70 crore, 2019-20-₹ 2,077.94 crore, 2020-21-₹ 2,649.68 crore and 2021-22-₹ 2,501.54 crore.

Corporation/Cluster buses was lowest in India, it being Public Service. On the other hand, input cost on Salary, Pension, AMC, CNG and other overheads had increased tremendously. Hence, there was no profitability on the operation of routes by the Corporation.

The reply only confirms the Audit contention that DTC was not operating buses on all the notified routes and reassessment of routes is needed in view of increased Metro lines and plying of Cluster Buses on various routes.

3.2.5.2 Periodic review of routes not conducted

Given the scenario of inadequate number of buses, losses incurred by the Corporation and its obligation to serve all parts of city, the Corporation needed to decide an optimum quantum of services on different routes by conducting periodical review of routes, to optimise its Revenue while serving the cause. For this purpose, Route wise Operating Cost per KM and the Earning per kilometer (EPK) are necessary to assess the economic viability of the same. However, it was seen in Audit that no such data in terms of Route wise cost of Operation was being maintained by the Corporation. It was further stated by the Corporation that no Viability assessment / Cost benefit analysis of the routes had been carried out in terms of EPK. Thus, the Corporation had not identified the uneconomical routes to take a decision regarding their continuance.

The Management accepted (May 2023) the Audit Observation and stated that the Corporation had to serve all the routes irrespective of the economic viability of the routes considering the Passenger comfort and need. Further, periodic review of routes was also conducted by the Corporation from time to time.

The reply is not acceptable as no such Review Report was annexed with the reply nor furnished during audit. Further, the reply is in contradiction to the same mentioned in Para 3.2.5.1 that the Corporation had stopped plying its buses on various routes where Cluster Buses were also being operated.

3.2.5.3 Rationalisation of Routes

Change in travel pattern of commuters, personalised mode of transport, expansion of urban spread, metro network, other modes of public transport authorised by DoT, warranted rationalisation of bus routes. The Corporation had not conducted any study for Route Rationalisation during the years 2015-22. Further, based on a Route Rationalisation study conducted by DIMTS in 2021-22, 40 additional routes were allocated to the Corporation for operation but only 26 of these routes were operational as of December 2022.

The Management accepted (May 2023) the Audit Observations but it is silent on reasons for operating only 26 out of 40 additional routes allocated to the Corporation.

Recommendation 3.4: The Corporation should conduct periodic review of routes for optimum utilisation of available buses.

3.2.6 Reliability of bus service

Reliability of bus service is mainly measured in terms of Regularity percentage/Operational Ratio and breakdown rate per 10,000 KMs of operation. Regularity is the percentage of trips operated to total scheduled trips.

Table 3.2 shows Regularity percentage of the Corporation buses during the seven years period ending March 2022.

Table 3.2: Regularity percentage of the Corporation buses

Sl. No.	Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Average no. of trips scheduled daily	39232	36115	35212	34167	32913	26795	33547
2	Average no. of trips operated daily	33497	33101	31341	30562	29832	24582	31834
3	Regularity Percentage/Operational ratio (2/1*100)	85.38	91.65	89.01	89.45	90.64	91.74	94.89

Source: Corporation data

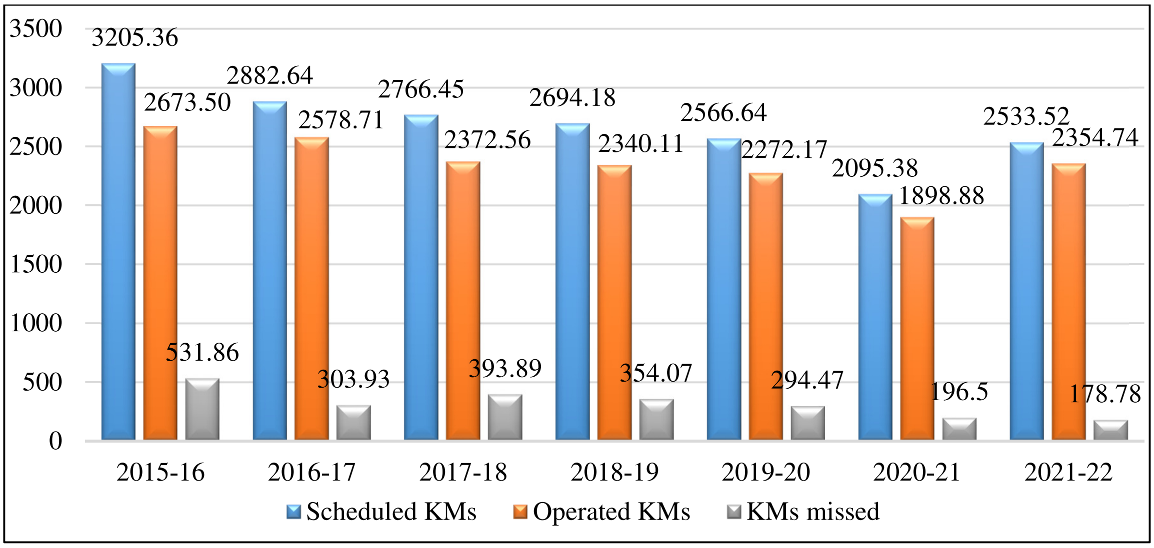
It may be seen from **Table 3.2** that about 10 *per cent* of the Scheduled trips were missed daily during 2016-17 to 2019-20 which improved slightly in 2020-21 and 2021-22.

The analysis of Missed scheduled KMs in respective years has been made in the paragraph under Table 3.3.

Missed Scheduled KMs

The **Chart 3.6** shows the Missed Scheduled KMs during seven years from 2015-16 to 2021-22.

Chart 3.6: Missed Scheduled Kilometers (in lakh KMs)



Source: Data furnished by the Corporation

It may be seen from Chart 3.6 that the percentage of Missed Scheduled KMs had decreased from 16.59 *per cent* in 2015-16 to 7.06 *per cent* in 2021-22.

However, percentage of Missed Scheduled KMs was on higher side as compared to those of KSRTC which ranged from 3.01 *per cent* to 6.52 *per cent* during 2015-16 to 2018-19. Scheduled KMs of the Corporation had come down from 3,205.36 lakh KMs in 2015-16 to 2,533.52 lakh KMs in 2021-22 due to reduction in average number of buses available from 3,817 to 3,206.

The cause wise analysis of the Missed Scheduled KMs as per information furnished by the Corporation are detailed in **Table 3.3**.

Table 3.3: Summary of reasons for missed KMs

(in lakh KMs)

Reason Type	Reasons for Missed KMs	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Controllable Reasons	Late Out shedding	36.67	18.90	19.17	9.84	7.28	4.68	5.12
	Unavailability of Adequate Buses	82.40	53.50	64.62	35.45	18.69	10.84	21.37
	Unavailability of CNG	7.72	4.27	5.12	3.09	1.68	1.24	0.23
	Want of drivers/ conductors	151.31	52.69	80.29	110.62	83.57	67.00	14.27
	Breakdowns	62.70	44.70	42.71	37.78	43.11	20.97	33.84
	CNG filling, change of crew etc.	29.06	17.79	13.71	7.24	3.75	2.77	3.10
Uncontrollable	Accidents	1.48	0.69	0.25	0.21	0.22	0.31	0.39
Unidentifiable	Not identifiable by DTC	160.52	111.39	168.02	149.84	136.17	88.69	100.46

Source: Data furnished by the Corporation

The observations of Audit in respect of controllable reasons stated in **Table 3.3** are as under:

i) The Fleet Utilisation of the Corporation Buses ranged from 76.95 *per cent* to 85.84 *per cent* during the period of April 2015 to March 2022 due to frequent breakdowns, unavailability of adequate buses and absenteeism of Drivers/Conductors which limited the number of buses available for operation. Cases of breakdowns could be resolved by ensuring timely preventive maintenance and ensuring 95/92 *per cent* availability of Low Floor Buses by the AMC Contractor.

ii) The major cause of Missed Scheduled KMs as identified by the Corporation was shortage of Drivers and Conductors. The data on person in position showed that there was no shortage of Drivers during 2015-16 and 2021-22 and Conductors during 2015-22. However, shortfall in Conductors occurred as they were deployed in other sections of the Corporation due to shortage of clerical staff.

iii) Delay in out shedding was due to inadequate monitoring of road worthiness of buses/availability of crew, etc.

The Corporation was, thus, deprived of ₹ 399.68 crore, as potential Revenue during 2015-16 to 2021-22 due to Missed Scheduled KMs on account of controllable reasons (43.59 *per cent* to 69.54 *per cent*) **Annexure 3.5**. Further, the Corporation could not identify the reasons for 30.18 *per cent* to

56.19 *per cent* of missed KMs during 2015-16 to 2021-22 and the consequent loss of potential Revenue amounting to ₹ 268.92 crore.

The Management accepted (May 2023) the Audit Observation and stated that the main reasons for missing of Scheduled Kms during 2015-16 to 2021-22 were breakdowns, traffic jam and absenteeism. However, continuous efforts are being made to decrease missed Kms by ensuring roadworthiness of buses through proper services/docking of vehicles and timely preventive maintenance by the service providers. Further, all the depot authorities were directed to reduce missing Kms to minimal level.

3.2.7 Fire Incidents

The incidents of fire in Low Floor Buses in the fleet of the Corporation, were a regular feature. During the period of seven years ending March 2022, 41 fire incidents occurred in these low floor buses. Out of these, six buses were completely burnt by Mob and neither damages could be recovered nor were the buses repaired. Records related to fire incidents of five burnt buses were not available with the Corporation to identify the extent of damage.

In respect of remaining 30 buses, main recorded reasons for other fire incidents were short circuit, High Tension (HT) lead burnt due to engine overheat, wheel overheat, HT cable /lead loose, wheel jam, lapse in maintenance by AMC, etc. This indicates poor quality of maintenance by Contractors. Further, Depot authorities cannot be absolved of their responsibility of ensuring proper maintenance of buses through inspections and checks before a bus leaves the depot. Such high occurrence of fire incidents not only raises serious concerns about the safety of Passengers but also impacts the reliability of Public Transport.

The Management stated (May 2023) that a committee had been constituted to examine the cause of individual fire incidents. In addition, directions were issued from time to time for various remedial measures/corrective actions to be taken to prevent fire incidents in Low Floor Buses. However, despite various remedial measures claimed to be taken by the Corporation, 41 fire incidents occurred during the period which shows the ineffectiveness of the measures taken by the Corporation.

Recommendation 3.5: The Corporation need to take incidences of fire seriously and take adequate steps to mitigate the same which is important for safety of Buses and Passengers.

3.2.8 Fuel Efficiency

Fuel cost is a major component of the cost for any State Transport Undertaking. For the Corporation, fuel cost constituted 16.22 *per cent* of total Operating Expenditure in 2021-22 as such fuel cost has a direct bearing on the economy of operations. As per the norms of Annual Maintenance Contract (AMC) for low floor buses, the Contractor (M/s Ashok Leyland Limited (ALL) and M/s

Tata Motors Limited (TML)) shall guarantee minimum average fuel efficiency in terms of KMs operated per Kg (KMPKG) of CNG fuel consumed, as shown in **Table 3.4**.

Table 3.4: Minimum average fuel efficiency of CNG as per AMC

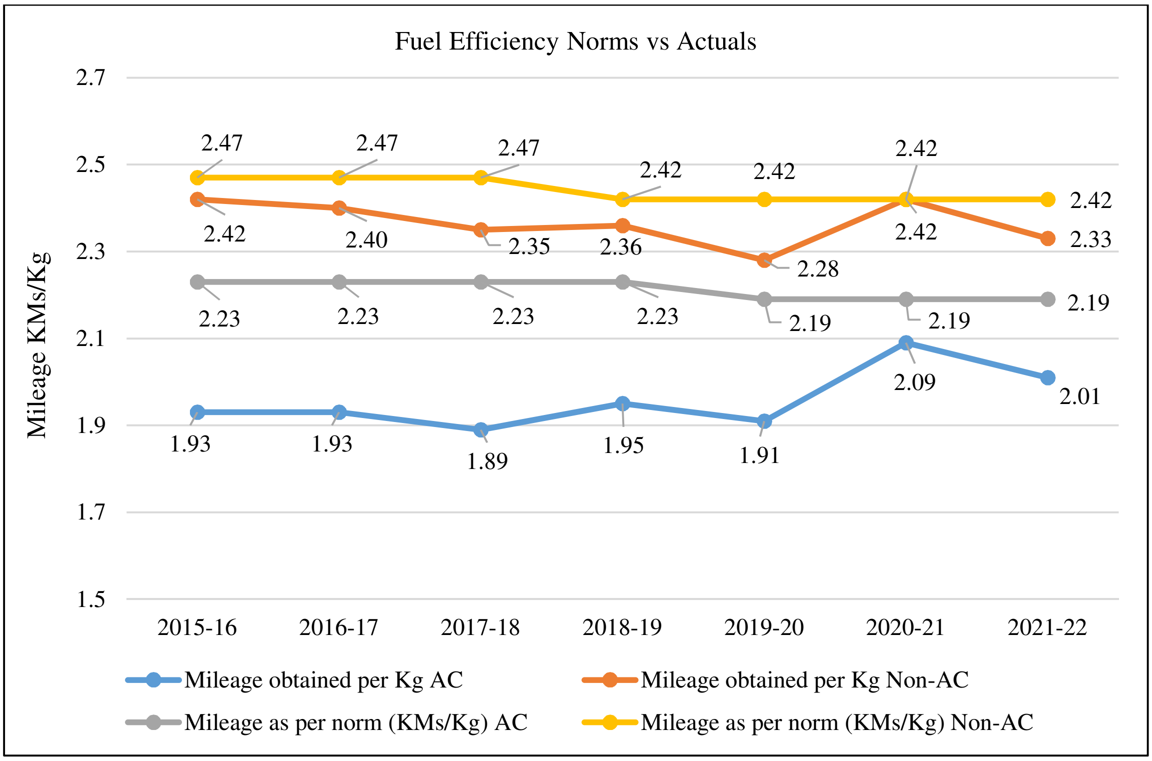
(in KMPKG)

Sl. No.	Description	Non-AC	AC
1	During warranty period	2.60	2.35
2	After warranty period up to 8 years of operation	2.47	2.23
3	More than 8 years: 7.5 lakh KMs or 12 years of operation, whichever is later	2.42	2.19

Source: As per AMC

Against the above norms, the actual consumption, mileage obtained per kilogram and extra expenditure on CNG consumption are detailed in **Annexure 3.6**. A summary of mileage obtained is given in **Chart 3.7**.

Chart 3.7: Mileage obtained vis-à-vis optimum mileage



Source: Data furnished by the Corporation and LoA with vendor.

In respect of low floor buses, penalties for consumption of CNG in excess of the norms was to be recovered by the Corporation from the Vehicle Manufacturers as per AMC. The Corporation consumed 469.55 lakh Kg of fuel in excess as compared to norms of AMC. With regard to penalties, an amount of ₹ 12.04 crore (40 *per cent* against losses) was recovered from M/s ALL against loss of ₹ 30.11 crore on account of excess CNG consumption during 2015-22. As regards M/s TML, against losses amounting ₹ 122.51 crore for excess consumption beyond norms, nothing was recovered during the same period.

Further, the Corporation had assessed recovery of ₹ 187.06 crore from M/s TML on account of excess consumption of CNG from 2009-10 to 2021-22. However, no amount could be recovered till date (December 2022) as the Arbitrator rejected the claim on the basis of methodology adopted for calculation of the penalty amount for CNG fuel KMPKG and the matter was pending for decision at Hon'ble High Court (December 2022). Similarly, an amount of ₹ 58.86 crore was assessed as recoverable from M/s ALL from 2009-10 to 2021-22. However, only ₹ 26.60 crore was recovered as of December 2022 in compliance to interim Arbitral Tribunal Orders.

The Management confirmed (May 2023) the Audit Observations and stated that up to March 2023 total penalty against excess CNG consumption of ₹ 86.10 crore was recovered from the bills of M/s TML in line with the directions from Court (3 February 2023). However, the fact remains that recovery of ₹ 100.96 crore was still pending (May 2023).

Recommendation 3.6: The Corporation may resolve the issue of high fuel consumption with M/s ALL and TML by regular pursuance of the matter with the Arbitrator.

3.2.9 Comparative Analysis of Operational Performance of Corporation vis-à-vis DIMTS

The comparative data of the Operational and Financial Performance of Corporation vis-à-vis DIMTS[10] apart from parameters already discussed in preceding paras for the period of seven years ending March 2022 is given in **Table 3.5**.

Table 3.5: Comparison of operational performance with DIMTS

Sl. No.	Particulars		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Buses held at the end of the year	Corporation	4344	4020	3944	3842	3762	3760	3762
		DIMTS	1293	1552	1648	1679	2741	2990	3239
2.	Accidents per One Lakh KMs	Corporation	0.06	0.05	0.05	0.05	0.05	0.04	0.04
		DIMTS	0.02	0.02	0.01	0.02	0.01	0.01	0.01
3.	Traffic Income per KM (in ₹)	Corporation	31.21	30.58	31.26	30.32	32.37	22.94	22.28
		DIMTS	25.92	27.23	28.51	27.73	27.81	14.76	15.54
4.	Revenue per KM (in ₹)	Corporation	37.60	35.63	37.49	37.79	39.28	26.83	28.04
		DIMTS	28.17	29.65	31.19	30.39	30.76	18.17	18.70
5.	Total Cost per KM (in ₹)	Corporation	213.58	245.63	307.17	342.83	400.04	544.34	487.94
		DIMTS	54.06	55.00	62.59	62.95	70.34	70.70	74.33
6.	Revenue Grants/ Viability Gap Funding (₹ in crore)	Corporation	1174.00	1550.00	2007.00	1825.00	2030.00	2475.00	2320.00
		DIMTS	287.50	288.71	387.57	393.85	638.90	1082.71	1350.77

Source: Corporation data and replies from DIMTS. Component wise breakup of Traffic income per KM, Revenue per KM and Total Cost per KM for DIMTS were not furnished by the Department, hence, reasons for variation could not be analysed.

[10] Delhi Integrated Multi-Model Transit System Limited

It may be seen from the **Table 3.5** that:

- Traffic Income and Revenue per KM of the Corporation was more than DIMTS in all the years under review. However, total cost of operations per KM in case of DIMTS ranged from ₹ 54.06 to ₹ 74.33 during 2015-22 whereas in case of the Corporation, total cost of operations per KM increased from ₹ 213.58 (2015-16) to ₹ 544.34 (2020-21). The Operational Cost of the Corporation includes interest cost of ₹ 122.60 per KM in 2015-16 and ₹ 355.67 per KM in 2021-22 which was not paid since 2011-12.
- DIMTS fleet increased from 1,293 buses in 2015-16 to 3,239 buses in 2021-22 whereas fleet of Corporation decreased from 4,344 buses to 3,762 buses during the same period due to ageing of the existing fleet and no new procurement of buses (except two Electric Buses in March 2022) during 2015-22 as discussed in detail in Chapter 4.
- Incidence of Accidents of Corporation Buses were on higher side than those in buses operated by DIMTS.
- Revenue grants/ Viability Gap funding required by DIMTS for operation of a fleet of 3,239 buses in 2021-22 was ₹ 1,350.77 crore, however, Revenue Grant received by the Corporation for operation of a fleet of 3,762 buses in 2021-22 was ₹ 2,320 crore.

The Management stated (May 2023) that DIMTS operates 12 meter 900 mm Floor Height Buses with Hydraulic ramps/Conventional Buses which are easy to maintain by own R&M staff. However, the Corporation was mandated to induct Low Floor Buses only which are highly advanced and require special purpose tools and skilled manpower for their maintenance.

The Management further stated that higher per KM Operational Cost of the Corporation and higher need for Grants was due to 6,937 permanent staff, payment of Ground Rent and Property Tax of the Depots being used by the DIMTS including Fare Collection Management System (FCMS) Depot. All the Bus Terminals owned by the Corporation are being maintained by it despite being used by DIMTS for its Cluster Buses without any cost. Further, pension payment of ₹ 50 crore per month to 20,000 pensioners was also made by the Corporation.

The reply is silent regarding the reasons for higher incidents of accidents of Corporation buses as compared to DIMTS.

Thus, DIMTS in almost each and every Operational as well as Financial aspect except Revenue per KM was performing better than the Corporation.

Recommendation 3.7: The Corporation needs to analyse the gaps between its performance and that of DIMTS and steps needs to be taken to improve the performance.

Chapter 4

Procurement of Buses and Implementation of Intelligent Transport System

Chapter 4: Procurement of Buses and Implementation of Intelligent Transport System

Hon'ble High Court of Delhi suo moto, through order dated 10 September 2007, inter alia, directed Delhi Government and Corporation to augment the city fleet to 11,000 buses. As per GNCTD Cabinet Decision (July 2012), Corporation's fleet share was required to be at 5,500 against which the Corporation had 3,937 low floor buses as on 31 March 2023. As discussed in Chapter 3, these low floor buses were more than 10 years old and were to be phased out completely by 2024-25. Although as on 31 March 2022, there was shortage of 1,740 buses against the requirement of 5,500 buses, no new buses (except two electric buses in March 2022 and 298 buses by November 2022) could be procured despite availability of funds of ₹ 233.06 crore as on 31 March 2022. The Corporation lost opportunity of availing Central assistance of ₹ 49 crore under FAME-I Scheme due to lack of clarity about specification of buses and indecision. Delay in finalisation of bids for 300 electric buses under FAME-II Scheme led to delay in procurement of buses with consequent reduction of contract period from 12 years to 10 years and non-levy of Liquidated damages of ₹ 29.86 crore as of December 2022. The AFCS and CCTV Surveillance system was not working in Corporation buses despite lapse of more than nine years since the project was initiated by the Government.

Thus mandated objective of providing efficient, adequate and reliable bus service in Delhi was not achieved.

4.1 Procurement of buses

The Corporation procures/engages Buses as per the policy decisions and funds provided by GNCTD. Consequent upon the approval of the Cabinet, GNCTD, efforts made by the Corporation since 2013 for procurement of buses are detailed in **Table No. 4.1**

Table 4.1: Action taken for procurement of buses

Particulars	1380 Non-AC buses with AMC	345 AC Premium Segment with AMC	1380 Non-AC buses with AMC	1000 Non-AC Standard size 900mm Floor height CNG buses without AMC	1000 LFB AC without AMC	1000 LFB AC without AMC (Re-tender)	300 Electric buses
Cabinet Approval	2086 dated 3.10.2013			2504 dated 1.9.2017	2713 dated 11.7.2019	2713 dated 11.7.2019	2795 dated 23.12.2019
Bus type/Floor height	Standard Floor buses (900 mm) CNG, with mainten-ance	Premium Segment 400 mm Floor height, CNG, with maintenance	Standard Floor buses (900 mm), CNG with AMC	Standard Floor 900 mm Non-AC CNG without AMC	Low Floor CNG, AC without AMC	LFB CNG AC without AMC	LF AC
Consultant	No consultant	No consultant	CIRT Pune	DIMTS	DIMTS	DIMTS	M/s. ALMONDZ
Consultancy fee paid	NA	NA	No fee mentioned	₹ 19.47 lakh	₹ 13.62 lakh	₹ 24.99 lakh	₹ 21.16 lakh
Estimated cost (₹ in crore)	414	311	414	330	850	850	1460
Tender date	4.10.13	4.10.13	30.6.14	15.3.18	26.7.19	20.3.20	15.10.2019 15.6.2020 3.12.2020
No. of bids received	One	Nil	One	One -M/s TML	Two	Two	Four
Outcome of tender	Foreclosed due to conditional bid	NA	Foreclosed due to unreasonably high basic prices and AMC charges.	High Court precluded (June 2018) from procuring Standard Floor buses.	Short closed due to discrepancies and irregularities	Contract agreement signed with M/s JBM for 700 buses and M/s Tata Motors for 300 buses, in Feb 2021.	The LOA was issued on 30.3.2021 to M/s JBM Auto Ltd. (200 e-buses) and M/s Tata Motors Ltd. (100 e-buses) with AMC at ₹ 68.58 per KM.
Decision	NA	NA	NA	Tender scrapped due to single bid and High Court decision.	To invite fresh bids	Procurement process kept in abeyance till further order as per GNCTD order dated 11.6.21.	

Besides the above, the Board approved nine proposals for procurement of buses during the period 2013 to 2021. However, these could not progress to Tendering stage either due to non-receipt of formal approval from GNCTD or change in specifications by GNCTD, as detailed in **Annexure 4.1**.

In this regard, Observations of Audit on tenders not finalized or finalised with delay are as under:

- The Corporation time and again changed the proposals for procurement of buses with different floor height between 900 mm, 650 mm and 400 mm or Midi-buses[1] and requirements changed from AC to Non-AC and with AMC or without AMC. This reflects that the Corporation itself was not sure which type of bus was suitable for the city leading to the Tender not being processed.

- Before floating Tenders, the Corporation did not assess the availability aspect from Vehicle Manufacturers (VMs). The Corporation decided specifications for 400 mm floor height premium segment AC buses against which there was no response due to unavailability of specified buses with VMs. As a result, the Tender failed each time.

- The main cause of failure of the above Tenders was procurement of buses along with AMC. The bidders quoted very high rates in such bids as they were facing difficulty in realising full payments for AMC for Low Floor CNG Buses of the Corporation. Despite this, the Corporation did not take a firm decision whether to go for AMC by VMs or AMC by a third party or in house Maintenance of buses by Workshop staff, leading to frequent change in the specifications and not finalisation of Tenders as detailed in above **Table No. 4.1**.

- The consultancy fee of ₹ 58.08 lakh became wasteful due to failure to finalise bids on three occasions.

- As per Urban Bus Specifications-II (UBS-II) laid down (April 2013) by the Ministry of Urban Development, Government of India (MoUD), maximum Floor Height of 400/650/900 mm is to be followed by the State Road Transport Corporation / State Transport Undertakings for Standard Size Bus. As per UBS-II, Cities having population of less than or equal to one million can procure buses having 900 mm Floor height also whereas Cities having population of more than one million will procure either 650 mm or 400 mm Floor Height Buses. Any change in composition is subject to approval of MoUD. After changing the specifications of buses multiple times in last seven years, it was finally decided to procure 1,000 fully built non Air conditioned Standard size of 900 mm Floor height CNG Buses without approval from MoUD which was against UBS-II specifications. Further, Hon'ble High Court also precluded (June 2018) the Corporation from procuring Standard Floor Buses as same were not 'disabled friendly'.

- The Commerce Secretary, Government of India, while informing that automobiles are available on GeM at highly discounted rates ranging from 12 *per cent* to 20 *per cent* over market rates, requested (December 2018) the Chief Secretary, GNCTD to issue necessary instructions to the concerned officers specifically Secretary Transport and MD of State Road

[1] Midi buses are larger than mini-buses and smaller than full size buses.

Transport Corporation to procure the vehicles on GeM. The Transport Department, GNCTD directed (21 January 2019) the Corporation to take action in accordance with the above orders. However, the Corporation did not explore this possibility and no reasons for the same were available on record.

- Letter of Award (LoA) for 1000 Low Floor Buses was signed with M/s JBM for 700 buses and M/s Tata Motors for 300 buses, in February 2021. However, based on a complaint, the procurement process of the same was kept in abeyance as per orders received from the Department on 11 June 2021. Further, the Government of India decided (August 2021) for undertaking a preliminary enquiry in the matter by the Central Bureau of Investigation; status of which, was not available on records during audit.
- The Corporation subscribed for engagement of 1500 Electric Buses (921 Faster Adoption and Manufacturing of Electric Vehicles (FAME II) scheme & 579 Non FAME II) under Department of Heavy Industries (DHI), GoI FAME-II scheme, through Grand Challenge scheme of Convergence Energy Services Limited (CESL). Accordingly, order for 1500 E-buses was placed on 14 July 2022, out of which, 900 E-buses were received till January 2024.

Though process of procurement of buses was initiated several times during 2015-22, except 300 E-buses[2], no other required buses could be procured till March 2023 despite availability of funds from GNCTD. Thus, delay in processing of tenders defeated the mandated objective of providing an efficient, adequate and reliable bus transit service to Delhi.

The Management confirmed and accepted (May 2023) the Audit Observations.

4.2 Loss of opportunity to avail Central Subsidy of ₹ 49 crore

Department of Heavy Industries (DHI), in a meeting held in November 2016, briefed about the FAME (Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles) Scheme launched in April 2015 under the National Electric Mobility Mission to encourage electric and hybrid vehicle purchase by providing financial support. Under this, State Governments may approach DHI for sanction and release of funds for procurement of E-buses.

Audit noted that the Board of the Corporation with regard to introduction of fully Electric Buses in Delhi as a pilot project directed (16 March 2017) that a proposal for procurement of 100 Hybrid Electric Buses along with proposal to

[2] Corporation entered into engagement of 300 e-buses under CAPEX Model of FAME-II scheme of Department of Heavy Industries, GoI. Under the Scheme, MHI contributed ₹ 55 lakh per bus as subsidy to Vendors which was to be routed through DTC. The Corporation has to pay the Vendor at the rate of ₹ 68.58 per Km for operating the buses. Hence, no upfront payment was to be made by the Corporation and the corpus of ₹ 233.06 crore remained unutilized. Out of these 300 e-buses, only 2 buses were received till March 2022 and remaining were received till November 2022.

engage a professional Consultant through Limited Tender enquiry under the FAME Scheme may be submitted. The Corporation did not take further action as FAME – I scheme was valid up to 31 March 2017. However, FAME-I was later extended up to 31 March 2018 or till launching of FAME-II scheme whichever was earlier.

Ministry of Heavy Industry & Public Enterprises, GoI informed (November 2017) GNCTD that DHI was administering FAME scheme to promote electric mobility with the aim of reducing dependency on fossil fuels. It further sought submission of an Expression of Interest (EoI) by interested Cities for procurement of Electric Buses/Four Wheeler Passenger Cars and Electric Three Wheelers before 30 November 2017.

The Corporation, after approval from Department, submitted a proposal for procurement of 100 Electric Buses to GoI on 29 November 2017 against which DHI approved (27 December 2017) 40 E-buses for Delhi. The Letter of Intent (LOI) was required to be issued by the Corporation by 28 February 2018 failing which the sanction was to be cancelled. However, the Corporation intimated the Department (9 January 2018) that it would not be feasible for it to place LOI by 28 February 2018 and as per its past experience, it would be able to place order by July 2018. It also informed that project for purchasing 40 E- buses would involve estimated expenditure of ₹ 88 crore (₹ 34 crore to be provided by DHI as incentive and ₹ 54 crore by GNCTD as equity to Corporation) besides involvement of expenditure on creating charging infrastructure in Depots. The Corporation decided not to go ahead with the sanctioned project though the FAME scheme was extended by GoI from time to time up to March 2019.

Thus, in spite of sanction of 40 E-buses for Delhi under FAME-I scheme and extension of the scheme from time to time till 31 March 2019, the Corporation did not procure 40 E-buses and lost the opportunity to avail the Central Subsidy of ₹ 49 crore under FAME scheme (₹ 34 crore towards cost of electric buses and ₹ 15 crore towards creation of charging infrastructure).

The Corporation stated (May 2023) that it had informed the Department in March 2018 about its having no technical manpower and thereby absence of expertise/knowledge about technical specifications of advanced technology based Electric Buses, implications in maintenance of Electric Buses, installation and operation of Charging infrastructure and the Tendering process for procurement of Electric Buses.

The reply is not tenable as the Corporation hired a Professional Consultant[3] to undertake the whole tender process in case of procurement of 300 electric buses as mentioned in Para 4.1. However, no efforts were made to hire a Professional Consultant in case of procurement of 40 electric buses, in spite of approval of the Board.

[3] M/s Almonds Global Securities Limited

Recommendation No. 4.1: The Corporation should ensure that a proper system is put in place to avail of the benefits of Government funding for improvement of the Public Transport system in the State.

4.3 Delay in procurement of Electric Buses due to delay in finalisation of bids – FAME Scheme - II

DHI launched (March 2019) Faster Adoption and Manufacturing of Electric Vehicles (FAME) Scheme Phase-II for a period of three years commencing from April 2019 for engagement of E-buses by adopting Operational Expenditure (OPEX)[4] model by State Transport Undertakings (STUs). The maximum incentive proposed was ₹ 20,000/- per KWh with capping of 40 *per cent* of the cost of bus. The amount of incentives for buses was subject to competitive bidding among the Original Equipment Manufacturers (OEMs) conducted by STUs for Intra-City, Inter-City or Inter-State Buses. The last date of submission of the Expression of Interest (EoI) by STUs to GoI was 18 July 2019.

The Principal Secretary (Transport) directed (4 April 2019) Corporation to examine and put up the proposal for engagement of 1,000 Low Floor Electric Buses under FAME-II scheme on OPEX model. The Corporation intimated DHI on 25 April 2019 that it was in the process of induction of 1,000 E-buses under FAME-II scheme and a detailed proposal would be submitted to GoI.

Audit noticed that the Corporation submitted the EOI to DHI on 2 July 2019 for which approval was conveyed by DHI on 21 August 2019 for engagement of 300 AC E-buses. It was stipulated by DHI that issuance of Supply Order to successful bidder should be made by 15 November 2019 failing which the offer was liable to be cancelled. The last date for issuing supply orders was later extended up to 31 March 2021.

The timeline followed by the Corporation in getting Cabinet approval, appointment of Consultant, Tendering process and placement of LoA is detailed in **Table 4.1** and further elaborated in **Table 4.2**.

[4] OPEX (Operational Expenditure) Model: The buses were operated by the concessionaire based on agreed per Km rate for specified period involving operation and maintenance of buses by concessionaire. Thus, ownership of buses remains with the concessionaire.

Table 4.2: Outcome of tenders for procurement of 300 E-Buses

Particulars	Tender finalisation process for engagement of 300 E-Buses under OPEX model		
	Ist instance	IInd Instance	IIIrd instance
RFP (Tender) floating date	15.10.2019	15.6.2020	3.12.2020
Date of pre bid meeting	21.10.2019	23.6.2020	7.12.2020
Date of Freezing and uploading of RFP after amendments in RFP	5.11.2019	8.7.2020	14.12.2020
Date of opening of Techno commercial Bids	21.11.2019	25.8.2020	28.12.2020
No. of bids received	Four M/s JBM Auto, M/s TML, M/s PMI & M/s Olectra Green Tech Ltd.	Three M/s TML, M/s PMI & M/s Azad Coach	Four M/s JBM, M/s TML, M/s PMI & M/s Olectra Green Tech Ltd.
Technically qualified bids	Three M/s JBM, M/s TML, M/s PMI.	Two M/s TML, M/s PMI.	Four M/s JBM, M/s TML, M/s PMI & M/s Olectra Green Tech Ltd
Date of opening of financial bids	13.12.2019	1.10.2020	22.1.2021
No. of bidders whose financial bids were opened	Three	Two	Four
Per KM Rate quoted in financial bid	JBM ₹ 82.60 TML₹ 83.00 PMI ₹ 98.13	PMI Ltd. -₹ 89.72 TML ₹ 96.70	JBM Ltd ₹ 68.58 TML : ₹ 72.20 Olectra Green : ₹ 76.10 PMI: ₹ 79.84
Estimated justified rate worked out by Corporation	₹ 76.39 per km adjusted rates of Nasik Municipal Corporation Tender.	₹ 81.71 per km adjusted rates of West Bengal Transport Corporation.	₹ 74.87 per km adjusted rates of WBTC, ₹ 76.91 per km adjusted rates of Ist call of tender and ₹ 84.12/km adjusted rates of IInd call of tender.
Negotiated price	M/s JBM Ltd - ₹ 82.51 per km	Not agreed for reduction in rates PMI -₹ 89.72 per km	No negotiation held
Proposal of the Chairman of Corporation.	26.12.2019 Proposed for acceptance of negotiated rates subject to Board approval.	19.11.2020 Negotiated rates higher than estimated rates and negotiated rates of previous tender hence, proposed to close the tender and fresh RFP to be floated by revisiting the present terms and conditions vis-a vis-tender floated by other STUs under FAME-II.	23.2.2021 The L-1 rates of M/s JBM of ₹ 68.58 per Km proposed for approval with the condition to give counter offer as per RFP i.e. 200 buses to M/s JBM and 100 electric buses to M/s TML.
Decision of the Board of the Corporation	Board on 1.1.2020 observed certain deficiencies in the tender and resolved to short close the tender and directed to invite fresh bids immediately to ensure transparency and fair play in the process.	Board was not apprised with the decision of the Management.	Board accorded approval on 01.03.2021. The Cabinet approved the proposal on 30.03.2021.
Award of Contract for engagement of electric buses	Tender short closed on 1.1.2020.	Tender short closed on 19 November 2020.	The LOA for engagement of 300 AC E-buses was issued on 30.3.2021 to M/s JBM (200 e-buses) and M/s TML (100 e-buses) at ₹ 68.58 per KM involving outgo of ₹ 1,824.28 crore over the concession period of 10 years.

As can be seen from the above table, the first Tender floated in October 2019 was short closed by the Board (January 2020) citing deficiencies in the Tender and with direction to ensure transparency and fair play in the process. The Corporation took considerable time of six months in retendering in June 2020 and further three and a half month to open price bids. Eventually, the 2nd tender was also short closed on 19 November 2020 after opening the price bids stating that negotiated rates were higher than the estimated rates and also against the negotiated rates of previous tender.

Thus, despite initiating the process for engagement of E-buses in April 2019 after launching of FAME-II scheme by DHI, the tenders could be finalised by the Corporation only on third attempt on 30 March 2021. It was observed that due to delay in award, the term period of the Contract had to be reduced from 12 years (October 2019 tender) to 10 years (December 2020 tender). As a result of the delay in processing and finalization of the LOA, the delivery of 300 electric buses also got delayed.

The Management accepted (May 2023) the Audit Observations and further stated that the first tender of E-buses was short closed on 01 January 2020 as quoted rates of L-1 bidders were unjustifiable. However, the reasons for delays in retendering and deficiencies observed were not elaborated in reply.

4.4 Penalty of ₹ 29.86 crore not imposed for delay in delivery of buses

As per LOA, the Buses were to be delivered as per the delivery schedule given in **Table 4.3**.

Table 4.3: Delivery schedule of Buses

Sl. No.	Lot No.	Scheduled date of delivery of 200 Buses by M/s JBM	Actual date of delivery	No. of days delayed	Scheduled date of delivery of 100 Buses by M/s TML	Actual date of delivery	No. of days delayed
1	Prototype	29.06.2021 (1 Bus)	March 2022	255 days	29.06.2021 (1 Bus)	April 2022	289 days
2	1st Lot of 118 Buses	29.10.2021 (59 Buses)	April to May 2022	165 to 201 days	29.10.2021 (59 Buses)	April to June 2022	165 to 231 days
3	2nd Lot of 100 Buses	29.11.2021 (60 Buses)	May to August 2022	170 to 257 days	29.11.2021 (40 Buses)	June to August 2022	200 to 250 days
4	3rd Lot of 60 Buses	29.12.2021 (60 Buses)	August to October 2022	226 to 295 days			
5	4th Lot of 20 Buses	29.01.2022 (20 Buses)	October to November 2022	265 to 283 days			

Source: LoA with vendors.

As evident from the above delivery schedule, delivery of Electric Buses was to be completed by January 2022. However, only two buses were received till 31 March 2022, after the lapse of 12 months from issue of LOA and delivery of all 300 buses was completed only by 8 November 2022.

As per Article 13.9.1 of LOA, in the event, the Operator is unable to deliver the buses as per the scheduled delivery date, for reasons not attributable to the Corporation or due to a Force Majeure Event, the Operator shall pay damages at the rate of ₹ 2500/- per bus per day for first thirty days of delay in the delivery and ₹ 5000/- per bus per day after thirty days of delay. However, damages for delay in delivery of buses worked out to ₹ 20.46 crore and ₹ 9.40 crore in respect of M/s JBM and M/s TML, respectively was not claimed by the Corporation as of December 2022.

The Management stated (May 2023) that demand for Liquidated Damages of ₹ 29.86 crore was raised (February 2023) on both the firms. However, both the firms were yet to deposit the same (May 2023).

4.5 Intelligent Transport System

In Para No. 2.2.3.9 of Report of CAG for the year ended March 2015, Revenue and Social & Economic Sectors (PSUs), GNCTD, it was reported that Urban Bus Specifications Safety Guidelines (UBSSG) of Ministry of Urban Development (MoUD), Government of India (GoI) made it mandatory for installation of Electronic Route Display System, Automated Fare Collection System (AFCS) using Electronic Ticketing Machines (ETMs), Global Positioning System (GPS) based Automatic Vehicle Location System (AVLS) and closed circuit television (CCTV) cameras in buses purchased under JNNURM[5]. The Corporation purchased 1,500 LF Buses between September 2009 and September 2010 under Jawaharlal Lal Nehru National Urban Renewal Mission (JNNURM). Further, in April 2013, Ministry of Urban Development, Government of India formulated Urban Bus Specifications-II (UBS-II) that have to be complied with by the relevant category of buses used in Urban Bus Services. As per UBS-II, the buses have to be ITS enabled bus - On Bus Intelligent Transport System – (OBITS). It shall consist of sub systems such as Passenger Information System, Automatic Vehicle Location System, Security camera network system, On-board pole mounted Ticketing Machines, etc. As AFCS, GPS, CCTVs schemes were at initial stage of implementation during previous Performance Audit (PA), the progress of same was reviewed during the current PA. Main observations are discussed in subsequent paras.

4.5.1 Automatic Fare Collection System (AFCS) not implemented

The Corporation awarded the work to M/s. Trimax IT Infrastructure and Services Ltd. (M/s. Trimax), which was the single bidder in second global tender floated in January 2015, for implementation of AFCS in Corporation Buses. Work order was issued to M/s. Trimax on 30 September 2015 for a period of six years. The implementation process of AFCS was divided in three phases[6].

Commercial operation of the AFCS project (first phase) started from December 2017 and the ETMs were rolled out in all the Depots in May 2018. M/s. Trimax showed inability to run the above AFCS project on 24 January 2020 and stopped providing services from 14 April 2020. Thus, implementation of AFCS in Corporation buses was discontinued since May 2020.

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[5] Jawaharlal Nehru National Urban Renewal Mission

[6] Phase I: Installation, implementation & commissioning of ETMs in 200 buses as pilot project and subsequently in total fleet.
Phase II: Implementation of validators in 200 Buses and Integration of AFCS with DMRC System
Phase III: Installation & commissioning of Validators in total fleet.

In the meantime, Hon'ble National Company Law Tribunal (NCLT) had also initiated Corporate Insolvency Resolution Process (CIRP) against M/s. Trimax vide order dated 21 February 2019. The Corporation filed its claim of ₹ 91 crore neither in time nor in proper format against M/s. Trimax. Resolution Professional (RP) rejected the claim of the Corporation on 9 January 2020. The Hon'ble NCL Appellate Tribunal, in its judgement dated 18 August 2022 also rejected the claim of the Corporation. The Corporation claimed an amount of ₹ 218.22 crore for pre-estimated damages, for periods up to November 2023 in July 2021. Hon'ble Supreme Court vide Order dated 14 November 2022 rejected the claims of the Corporation against M/s Trimax.

The Corporation appointed M/s. Earnst & Young Limited (E&Y) as Bid Management Consultant at a cost of ₹ 17.00 lakh for implementation of AFCS in the Corporation Buses. As of December 2022, Tender for selection of System Integrator for implementation of AFCS was under process and file was pending for approval for floating Open Tender as of December 2022. Payment of ₹ 8.50 lakh was made to M/s. E&Y.

As AFCS system was not functioning since May 2020, the Corporation failed to take apparent benefits of AFCS system of reduction in costs and checking revenue leakages. The Corporation failed to recover damages of ₹ 91 crore against M/s Trimax due to delay in filing the claim which was rejected by NCLT in August 2022.

The Management accepted (May 2023) the Audit Observation and stated that the Transport Department had floated National Common Mobility Card based AFCS tender for the Corporation and Cluster buses which was due for opening on 28 February 2023. The fact remains that implementation of AFCS system had been unduly delayed.

Recommendation 4.2: The Corporation should take up the matter with Transport Department to speed up the process for implementing the AFCS system.

4.5.2 CCTV Surveillance System in buses not functioning

In a meeting held on 12 March 2013 under the chairmanship of Union Home Secretary, Government of India, it was decided that Corporation would install on board CCTV cameras in the buses linked to Central Control Room and footage would be made available to Delhi Police in case of any terrorist event or an accident. This was communicated to the Corporation in August 2013. Accordingly, as a pilot project CCTV cameras were installed in 100 buses of Sarojini Nagar Depot and 100 buses of Rajghat Depot by November 2014. After the Pilot project, Tender for installation of CCTV cameras in all buses was to be initiated by the Corporation.

The Corporation decided (in August 2016), after rolling out project of CCTV Cameras on Pilot basis in November 2014 that tendering process for installation of CCTV cameras in Corporation and Cluster Buses and installation of

Passenger Information System (PIS) only in Corporation Buses would be carried out by the Transport department, GNCTD. Accordingly, Transport Department, GNCTD (TD) appointed (February 2018) M/s. E&Y as Consultant for Bid Management Process for installation of CCTV System in Corporation and Cluster Buses. Tenders were floated for installation of CCTV system three times, in November 2018, January 2019 and July 2019. Out of the two technically qualified bidders, the work was awarded to L-1 bidder M/s. Telecommunication Consultants India Limited (TCIL), in December 2019 at a cost of ₹ 149.98 crore for 5,000 buses (with a clause for variation of 10 *per cent* in quantity) of the Corporation and Cluster out of which Cost for Corporation Buses was ₹ 89.64 crore. Further, considering the issues of women safety, the Council of Ministers also decided (December 2019) that Internet Protocol Closed Circuit Television (IPCCTV), Panic Buttons and Automatic Vehicle Tracking System should be installed in all existing Corporation and Cluster Buses which would also form part of the Contract.

After completing Supply, Installation, Testing and Commissioning of CCTV System as per Master Service Agreement (MSA) in 3,697 buses of the Corporation, a payment of ₹ 52.45 crore, was released to M/s TCIL in March, 2021 after deducting applicable penalties. The Go-Live date, i.e., effective date to start the Contract of five years was to be declared after conducting the User Acceptance Test (UAT). However, a Committee for this purpose was constituted by the Department only in June 2022, i.e., after more than one year of installation and UAT was yet to be conducted as of December 2022.

Meanwhile, M/s. TCIL submitted an invoice dated 21 June 2021 for payment of ₹ 1.65 crore on account of O&M Charges for first quarter. The Corporation, however, informed that payment cannot be processed without successful completion of UAT. M/s. E&Y also, vide email dated 11 August 2021, informed that, it had not received the payment for the last three quarters and stopped work from August 2021.

As per information provided (December 2022) by the Corporation, M/s. TCIL was in the process of developing a Real-time Dashboard for keeping the records of Panic Button alerts and action taken on them and dashboard for MIS. Operation and Maintenance (O&M) part was yet to be started as of December 2022.

Thus, despite lapse of more than nine years since the project was initiated by the Government, installation of CCTV System in Corporation Buses was incomplete as of December 2022. Even after Supply, Installation, Testing and Commissioning of CCTV System in 3,697 buses of the Corporation in January 2021 and release of payment of ₹ 52.45 crore to M/s TCIL, UAT was not conducted by the Department till December 2022. With the passage of time deterioration of the CCTV systems installed also cannot be ruled out due to lack of maintenance as during a Joint Inspection conducted[7] in September 2022, it

7 Conducted by TCIL, DTC and Millennium Automation Private Limited.

was found that CCTV System was functioning in only 284 out of 430 buses and Generation of SMS to Depot Manager was not functioning in any of the 15 buses test checked in two Depots each.

The Management accepted (May 2023) the Audit Observation and submitted that the Department is in process of developing Real time Dashboard for MIS reports for CCTV project and a letter was written in February 2023 to the Department for taking necessary action. The fact remains that due to delay in commencing operation of the CCTV system in all the buses intended, objective[8] of providing security features and real time information to passengers could not be achieved.

Recommendation 4.3: As the project conceptualized in March 2013 was unduly delayed, the Corporation should immediately take up the matter with Department, for installation of CCTV System and the UAT in Corporation buses for safety of passengers.

4.5.3 CCTV surveillance system in Depots/Units/Terminals of the Corporation not installed

The Delhi Transport Corporation intended (October 2017) to install CCTV surveillance system for monitoring various activities in Depots and Offices, inculcate discipline among employees, keep strong vigil against miscreants, safe guard Depot premises from external threats etc. Hon'ble Minister of Transport, had also directed the Corporation (November 2017) after inspecting Uttam Nagar Terminal, to install CCTV surveillance system in all Bus Terminals in Delhi so that any undesirable activities could be checked/curbed.

In light of the above requirements, the tentative quantity of CCTV surveillance system to be installed in various Depots/Corporate office/Terminals was assessed at 358 (December 2017) with an estimated expenditure of ₹ six crore with maintenance period of five years.

The Corporation forwarded (March 2018) the proposal of the installation of CCTV surveillance system in all the Depots/Units/ Terminals for approval by the GNCTD. However, the Department intimated (May 2018) that Corporation being an Autonomous Body is duty bound to secure its premises through CCTV surveillance and take a decision on the matter at its own level and implement the same through its own resources. Audit noticed that the matter was not further processed even after a lapse of more than four years as of December 2022.

The Management stated (May 2023) that installation of CCTV system in Depots/Units/Terminals was kept on hold due to unavailability of sufficient Capital funds. The fact remains that not installing of CCTV system in Depots had security issue as number of cases were reported by various Depots regarding thefts of two wheelers, lockers, broken windows and intruder activities, etc.

[8] Prevent terrorist event or accident, Women Safety, Theft acts & other threats to passengers.

Chapter 5

Human Resource Management

Chapter 5: Human Resource Management

The personnel policy of the Corporation was flawed as there were shortages across cadres except Conductors. Excess Conductors were deployed in other Administrative jobs, for which they were not adequately trained which eventually affected the quality of work. The reflection could be seen in decline in Operational Performance on account of reduced effective kilometers of Operation.

5.1 Introduction

Human Resource Management (HRM) is a strategic and comprehensive approach of managing people at workplace. Maintaining sufficient number of adequately trained personnel across all cadres is a pre requisite for an organization like Delhi Transport Corporation which is not only a technical organization but is also financially not sound. The Corporation had manpower staffing in various categories which were recruited under Regular and Contractual mode. It also re-engaged retired employees as Consultants on contract basis. It has a separate Training Wing which imparts training to its staff.

5.2 Personnel Policy

The Board approved (2013) the Personnel Policy in principle subject to the fact that the proposed norms for Ministerial Staff, Printing Press, Civil Engineering Department may be 50 *per cent* for Regular and 50 *per cent* for Contractual Staff and in case of Officers, the norms may be 70 *per cent* and 30 *per cent* for Regular and Contractual Officers respectively.

The Sanctioned Strength also depends upon the availability of fleet (buses) with the Corporation and nature of Repair & Maintenance contracts of the fleet. Transport being a dynamic field, the fleet keeps on changing due to phasing out and addition of new buses. Still, no revision in the Personnel Policy was carried out by the Corporation since 2013.

The Management replied (May 2023) that Personnel Policy was last revised in 2013 and as on date the fleet of the Corporation was at an increasing trend. The Corporation had also provided around 5,500 conductors and other staff to the FCMS Depots.

The reply of the Management is not acceptable as during the audit period (2015-22), the fleet was consistently at decreasing trend and conductors were excess in each financial year. Further, sanctioned strength also includes Conductors for FCMS depots[1].

[1] From 2019-20 onwards, the Corporation is providing conductors to Transport Department for fare collection in Cluster buses (FCMS) on reimbursement basis.

5.3 Manpower position of the Corporation

The details of years wise Sanctioned Strength (SS) and Person in Position (PIP) of the Corporation is indicated in **Annexure 5.1** and position as on 31 March 2022 is summarised in **Table 5.1**.

Table 5.1: Sanctioned Strength and Person in Position as on 31 March 2022

(Figures in numbers)

Cadre	SS	PIP (Regular + Contractual)	Excess/Shortage (-)
Drivers	9,925	10,710	785
Conductors	14,077	17,221	3,144
Traffic Supervisors	2,315	731	(-) 1,584
Repair and Maintenance	2,143	1,395	(-) 748
Administration and Ministerial staff	2,616	534	(-) 2,082
Total	**31,076**	**30,591**	**(-) 485**

Source: Data furnished by the Corporation.

As per **Annexure 5.1**, PIP and SS during the year 2015-16 was 26,291[2] and 26,508 and during the year 2021-22 was 30,591[3] and 31,076 respectively.

In this regard, Observations of Audit are as under:

- During 2016-17 to 2020-21, there was shortage of Drivers ranging from 35 to 622 and shortage of Traffic Supervisors ranging from 773 to 1,722. During 2019-20 to 2021-22, there was shortage of Repair and Maintenance staff ranging from 70 to 748 and during 2015-16 to 2021-22 shortage of Administration and Ministerial staff ranging from 1,454 to 2,082.

- Apart from shortage of manpower, there was excess of Drivers in 2015-16 and 2021-22 and Conductors from 2015-16 to 2021-22 against the norms fixed by the Corporation.

- Optimum utilisation of manpower and control over its cost were imperative to achieve high productivity. The manpower cost per effective km had increased ranging from ₹ 55.65 to ₹ 114.50 during 2015-22. This indicates upward manpower cost per effective km.

- On the other hand, manpower productivity per day per person[4] ranged from 26 to 18 kms during 2017-18 to 2021-22. Correspondingly, All India

[2] 26,291 includes 11,359 contractual employees viz. 3,794, 7,524 and 41 numbers of drivers, conductors and officers/consultant respectively. Further, 26,291 does not include Repair and Maintenance manpower position as same was not made available.

[3] 30,591 includes 22,946 contractual employees viz. 5,405, 17,047, 450 and 44 numbers of drivers, conductors, R&M staff and officers/consultant respectively.

[4] Productivity per day per person (Kms) = (effective KMs during the year/Manpower)/365 days

staff manpower productivity was 63.26 and 61.82 kms during 2017-18 and 2018-19. This indicates low manpower productivity.

- Conductors to Bus Ratio in case of the Corporation ranged from 2.71 to 3.49 conductors per bus. On the contrary, the same was two conductors per bus in DIMTS. This shows excess conductors in the Corporation as compared to DIMTS.

5.4 Diversion of Staff

1. During the period from 2015-16 to 2021-22, Drivers, Conductors and other staff ranging from 114 to 202[5] were diverted to the State Transport Authority (STA)/other Departments of GNCTD. The salary and allowances amounting to ₹ 56.92 crore paid to these diverted Employees were borne by the Corporation despite its tight fiscal condition. The Management accepted (May 2023) the Audit Observation and stated that the Department directed (06.03.2013) that the Corporation may continue to pay the salary to the diverted staff.
2. Surplus Conductors were deployed at other sections of the Corporation due to shortage of Clerical staff for which they were neither qualified nor trained, which would have impacted the quality of work of other sections also. The Management accepted the Audit Observation. Similarly, the work shop staff became surplus due to change in norms from 1.50 to 0.25 man per bus. The surplus manpower was deployed in other divisions viz. Administrative Sections such as Cash Section, Schedule Section, General Office etc., which, in turn, may impact the quality of work.

Thus, it is evident that the Corporation had neither framed any Personnel Policy in respect of manpower nor did it develop any system and mechanism to monitor and control deployment of excess or shortage of manpower. Due to un-availability of any System/Mechanism and Policy, Corporation was not able to decide and determine the actual requirement of Conductors.

5.5 Manpower Training

5.5.1 Inadequate training to drivers and conductors

To reduce the accidents and making traffic flow smooth on the roads, the Hon'ble High Court of Delhi directed (March 2007) the Corporation to prepare an Educational-cum-Training Programme for all its Drivers to ensure that they undergo Training Courses and /or Refresher Courses under that Programme. In accordance with these directions, the Corporation runs seven[6] Training Centers under the Administrative Control of its Training School established at Nand Nagri Depot Complex.

[5] During the year 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21 & 2021-22, employees diverted were 146, 190, 178, 196, 202, 193 and 114 respectively.

[6] Nandnagri, Dwarka Depot Sector-8, Subhash Place, Sarojini Nagar, Peeragarhi, Rohini and Tehkhand.

The year wise details of scheduled Training not attended by Drivers are detailed in **Table 5.2**.

Table 5.2: Year wise details of Scheduled training missed by Drivers

Year	Scheduled training not attended by Drivers in percentage
2015-16	62.66
2016-17	57.29
2017-18	56.67
2018-19	61.57
2019-20	53.36
2020-21	26.48
2021-22	46.48

Source: Data furnished by the Corporation

It may be seen from **Table 5.2** that during the years 2015-16 to 2019-20, scheduled training not attended by the drivers ranged from 53.36 *per cent* to 62.66 *per cent.* Further, it was also observed that number of accidents[7] ranged from 121 to 212 during same period[8] , which indicates that an accident occurred on an average every third day. Further, effective kilometers[9] of operation of buses had also decreased during 2015-22.

The Management accepted (May 2023) the audit observation and stated that Training was imparted as per schedule to drivers every month. However, Training was missed due to maximum out-shedding of buses. The reply of Management is not acceptable as regular Trainings improve Operational skills of the Drivers which eventually enhance their overall performance. Thus, for road safety and improvement of effective kilometers, Training Schedule should not be missed.

5.5.2 Depriving the Drivers Training on Simulators due to non-procurement of Simulator and diversion of earmarked fund

Government of NCT of Delhi accorded approval in February 2005 for utilisation of Interest of Plan funds of ₹ 1.97 crore for procurement of Simulator for Training School. Through Simulator, a system was to be developed to teach how to drive bus in such a way so as to increase productivity while maintaining a high safety standard and also for evaluating the performance of the existing Driver, Refresher Training and up-grading the skills of existing Drivers, etc. Thus, it would have reduced day to day maintenance cost of low floor buses and led to increased utility of Automobile product in terms of life.

However, Audit noticed that only ₹ 13 lakh was utilized by the Training School and remaining amount of ₹ 1.84 crore of this earmarked fund was diverted and utilised by the Corporation for payment of outstanding liability of IGL and AMC with the approval of the Board and GNCTD. Resultantly, the Corporation

[7] 2015-16:153, 2016-17:128, 2017-18: 212, 2018-19:125, 2019-20:121, 2020-21:69 & 2021-22: 95.

[8] 2020-21 & 2021-22 not considered due to traffic restrictions (Covid-19).

[9] Total revenue earning kilometres.

could not procure the Simulator and the Drivers were deprived of the essential training through Simulator.

The Management accepted (May 2023) the Audit Observation and stated that diversion was made with the approval of Competent Authority.

Recommendation 5.1: The Corporation should:

- ***Frame the Personnel Policy for optimum utilization of manpower and have proper mechanism for engagement and deployment of manpower.***
- ***Impart mandatory training to the Drivers and Conductors to not only improve their Operational Parameters but also to provide a better level of service to Passengers.***

Chapter 6

Other Issues

Chapter 6: Other Issues

In addition to the irregularities, deficiencies and non-compliances in Planning, Operations, Finance, and Manpower, Audit also found delays in completion of Deposit work, non-compliance of Codal provisions, inability to evict unauthorized occupants, etc. indicative of the ineffective approach adopted by the Corporation in dispensing off their functions.

6.1 Loss of subsidy and underperformance of Solar Power Energy Units

The Corporation installed Solar Power units in three of its Depots in 2015 at a total cost of ₹ 3.18 crore through *Delhi State Industrial and Infrastructure Development Corporation* Ltd. (*DSIIDC*). The project also included Comprehensive Annual Maintenance (CAM) for five years w.e.f. 8 April 2015, i.e. the date from which these Units started functioning. After completion of CAM period, no agency was appointed by the Corporation for maintenance of these solar power plants.

Ministry of New and Renewable Energy (MNRE), Government of India provided subsidy for Solar Power Plants and paid the first instalment of subsidy amounting to ₹ 12.50 lakh. The balance subsidy of ₹ 29.14 lakh was not paid, as MNRE on Inspection (19 February 2020), found various deficiencies in Installation and Maintenance of these Units which compromised the Units efficiency. However, the Corporation did not take any action to rectify the deficiencies pointed out by MNRE for claiming the balance subsidy. It also did not take any action against the agency which was responsible for maintenance of the plants as there was no provision in the contract to penalise the agency for its underperformance.

Further, as per MNRE's assessment, these plants were expected to generate, on an average, three Units per day per KW of installed capacity. At the prevalent tariff rate, the expected payback period was five to six years from the start of operations. Audit observed that these plants could generate only 12.50 lakh units of power against the expected generation of 26.85 lakh units, i.e., less than 50 *per cent* of the expected power generation, during the period from April 2015 to March 2022. The cost recovered from the plants as per prevailing tariff during this period (almost seven years) was ₹ 1.36 crore which was only 42.77 *per cent* of the capital cost of ₹ 3.18 crore of the project. Thus, failure of the Corporation in ensuring proper maintenance of the plants rendered a major portion of the expenditure unfruitful.

Recommendation 6.1: Corporation should address the deficiencies in Maintenance of Solar Power Units to ensure maximum generation of power.

6.2 Loss of ₹ 221.28 crore to the Corporation due to unauthorised occupation of Staff Quarters

In 1978, the Corporation transferred Ownership Rights of 4,844 out of 5,144 Residential Quarters to the Employees who were residing in these Quarters. However, ownership of 150 Quarters each at Hari Nagar and G.T. Road colonies was not transferred at that time. In 1979, the Corporation decided to sell out these tenements to the occupants but rescinded this decision in 1981. From then, matter had been under litigation until Hon'ble Supreme Court decided the ownership right in favor of the Corporation in November 2006. However, the Corporation could not get these Quarters vacated.

Although the Corporation Board directed (2016) to get these Colonies vacated from the occupiers immediately but the Corporation started Eviction process only in November/December 2020. Even then, it could not do so due to un-availability of Police force. Since then, no action has been taken by the Corporation to evict the unauthorised occupants of the Staff Quarters.

As of March 2023, 287 Staff Quarters continue to be under unauthorised occupation and an amount of ₹ 221.28 crore[1] was recoverable as on 31 March 2022 in the form of Rent and Water Charges from the occupants.

The Management accepted the Audit Observation and assured for taking corrective action.

6.3 Delay in completion and discrepancies in execution in respect of work of Ghuman Hera Bus Depot and Mundela Kalan Bus Depot

Corporation awarded separate Works for construction of two Bus Depots by PWD as Deposit Work, at Ghuman Hera and Mundela Kala on 8.05.2018 and 7.05.2018 respectively and same were to be completed within six months. However, both the Works were completed on November 2021 and January 2022 respectively. The Expenditure incurred by PWD on these Projects was ₹ 28.93 crore (Ghuman Hera) and ₹ 15.38 crore (Mundela Kalan) respectively. Examination of records available at the Corporation revealed that Extra items costing ₹ 8.10 crore in case of Ghuman Hera and ₹ 5.50 crore in case of Mundela Kalan were got done by PWD without the prior approval of the Corporation which was irregular as CPWD Manual clause 24.2.3 (1) stipulates that prior sanction of the Competent Authority is required for extra or Substituted items. The Corporation without assuring the reasonability & detail of Extra items accorded ex-post-facto approval for both the Works on 7 October 2021. The Finance Wing of the Corporation observed that Civil Engineering Department of the Corporation should have ensured prior approval in such cases. Further, although there were delays of three years or more in completion of both the

[1] Rent of ₹107.34 crore & ₹112.94 crore and Water Charges of ₹48.14 lakh ₹52 lakh for Hari Nagar Colony and G.T. Road Colony respectively totaling to ₹221.28 crore till 31.03.2022.

Projects, the Penalty levied on the Contractors by PWD for the delay was not evident from the records of the Corporation.

The Management stated (May 2023) that PWD did not levy any Penalty on Contractor despite delay of Work and Extra work was within the limit of Administrative approval. However, reply did not address the reasons for including Extra items and delay in work which eventually escalated the contract value and delayed in operation of Depots in time.

6.4 Oxygen Tankers worth ₹ 17.84 crore lying idle

GNCTD decided (June 2021) to procure 25 Oxygen Tankers of 350 MT capacity for preparing Delhi for a potential 3rd wave of Covid-19 and a budgetary provision of funds of ₹ 31 crore was made for the same. The requirement was later revised to 12 Tankers. Further, it was directed that the Corporation can also figure out an optimal usage model by leasing these Tankers to other States or Institutions as per requirement in normal course.

After following due procedure, the Supply Order was placed on bidder (technically qualified single tender) on December 2021 for ₹ 17.84 crore. In this regard, Audit observed that 12 Oxygen tankers had been delivered to the Corporation from March 2022 till January 2023. However, all these Tankers were not utilized despite explicit direction of GNCTD for leasing out. They remained idle, parked in the open and exposed to natural elements rendering them liable to deterioration. Thus, the Corporation failed to utilise any Tanker by leasing them out commercially.

The Management accepted (May 2023) the Audit Observation and stated that they had initiated the process of leasing out in March 2023, however, no response was received.

Chapter 7

Internal Control Mechanism

Chapter 7: Internal Control Mechanism

Internal Control Mechanism was deficient. There were inefficient managerial controls and lack of accountability. Audit noticed indecisiveness in finalising the tenders for purchase of new buses, weak operational control, lack of coordination amongst divisions, lack of follow up with debtors, delay in statutory compliances, etc., leading to losses to the Corporation.

7.1 Introduction

An effective Internal Control Mechanism is an integral process within an entity which provides reasonable assurance of economical, efficient and effective operations and adequate safeguards for entity's resources against loss. Internal Control must be properly designed and implemented to be useful in achieving the organisations Strategic, Operating, Compliance and Reporting objectives.

7.2 Internal Audit

The Corporation has an Internal Audit wing which confined itself mainly to Establishment matters. Audit of Operational and Financial matters was entrusted to a firm of Chartered Accountants which submitted its Audit Report to the Managing Director of the Corporation.

It is seen that the scope of audit of Chartered Accountants/Internal Audit wing was mainly confined to Establishment issues, review of contracts, financial matters and compliance to AMC conditions, etc. However, due to restricted scope of work, Internal Audit failed to address larger Operational issues like not preparing of plans, not fixing of Depot wise Operational and Financial targets and their achievement.

There was huge pendency of Audit Objections (2015-22), with 7,116 Audit Objections outstanding out of the 32,881 raised. Further, in the Internal Audit carried out by the CA firm for the year 2021-22, no Objection was settled out of the 507 Objections raised. Owing to the size of the Corporation and the financial crisis being faced by the Corporation, it becomes imperative to address all the issues raised by Audit at the earliest.

The Management accepted the Audit Observation and stated that pending observations have reduced from 7,116 to 4,305 as on 31 March 2023.

Recommendation 7.1: The Corporation should take timely action for disposal of huge pendency of Audit objections.

7.3 Audit Committee Meeting

The Corporation Board inter-alia, resolved (2007) that the Audit Committee of the Corporation should endeavor to meet once in every quarter. The Board reconstituted the Audit Committee (2009) for conducting the meetings on quarterly basis. However, only six meetings were held from February 2007 and the last meeting was held in December, 2015.

It was decided by the Management (17 February 2021) that all the important matters of the Corporation relating to Policy or Finance were being monitored/reviewed from time to time by the Government through the Transport Department being Administrative Department of the Corporation hence, Audit Committee system was discontinued in February 2021 after the approval of MD.

Audit observed that Audit Committee is an important mode of decision making in various key matters, comprising of members of Planning and Financial Department of GNCTD also, who may have independent and critical look over the functioning of the Corporation. Not holding of meetings of the Audit Committee and discontinuance of the Committee without approval of the Board, rendered the functioning of the Corporation vulnerable as the oversight function of the Audit Committee was dispensed with.

The Management accepted the Audit Observation.

Recommendation 7.2: The Corporation should continue the practice of holding of Audit Committee Meetings at regular intervals.

7.4 Other deficiencies in Internal Control

The instances which highlighted the deficiencies in the Internal Control Mechanism, regarding Operational and Regulatory functions, are as detailed below:

- There was indecisiveness in finalising Tenders for purchase of new buses which were required to keep adequate bus fleet on road. This led to overage fleet plying on the roads leading to reduction in Operating parameters and an increase in the Expenditure incurred by the Corporation.

- Fuel efficiency by Low Floor Buses not maintained, even when these were under AMC/warranty and lack of penal action against the service providers points towards weak Internal Control.

- Operational Statistics were being prepared by the Corporation for each month indicating the Operational Performance of the Corporation for that month. However, it was seen in Audit that the same were not being discussed at Board Level, in the absence of which, no plan was prepared/corrective action was taken to enhance the productivity. The Management stated (May 2023) that Operational Statistics were discussed in the Board meetings as and when any reference was required. The reply is not acceptable as the statistics were never discussed in the Board meetings during the audit period, except in one meeting (27 December 2016) wherein, a selective summary of operational data of six months was placed for information only.

- During the period of seven years from 2015-16 to 2021-22, the post of CMD/MD was held by eight different incumbents for periods ranging from one month to 23 months depriving the Corporation of the benefits of continuity and steady leadership required for accountability and accomplishment of the Organizational Objectives. The Management stated (May 2023) that matter pertains to GNCTD. However, reply of the Department was awaited (May 2023).

- Provisions of CPWD Manual such as prior sanction of the Competent Authority for Extra or Substituted items, were not being complied with in Works. The same were also objected to by the Finance Wing of the Corporation while giving post facto approval.

- Lack of Internal communication between Publicity Division and Depot & Accounts division led to outstanding claims against M/s Rose Advertising Private Limited (RAPL) in contract for display of advertisement and maintenance /upkeep of BQS/Time Keeping Booths, getting time barred and eventually leading to a loss of ₹ 1.74 crore. Despite being a persistent defaulter, the Corporation again entered into a contract with M/S RAPL for Bus Body Wrap in 2018 which was again defaulted by the firm and the contract was terminated in January 2020, before the completion of contract period (December 2023). The Management accepted (May 2023) the Audit Observation and stated that Contractor had been blacklisted after default in 2020.

- The Corporation had awarded the contract for display of advertisement on Bus Queue Shelters/Time Keeping Booths to seven[1] firms in the year 2004 and 2005. As per the agreement, the Contractor/Advertiser was to pay Advertisement Tax or any other Tax directly to the authorities and this amount would be in addition to the License Fee. Service Tax on leasing out of space and time for advertisement became applicable w.e.f.

[1] 1. M/s Shivaai Industries Pvt. Ltd., 2. M/s International Avenues, 3. M/s Satish Chand Rajesh Kumar Pvt. Ltd., 4. M/s Shree Agresen Advertiser, 5. M/s Hindustan Construction Corp. 6. M/s Pioneer Public Corp. and M/s Selvel Media Ltd.

1 May 2006. In order to collect Service Tax, the Corporation was required to obtain a Service Tax Registration number.

The Corporation obtained Service Tax Registration number in April 2008, after delay of almost two years. Service Tax Department issued three show cause notices to the Corporation during 14 January 2008 to 01 August 2008 regarding non-payment of Service Tax. Consequently, the Corporation raised bills of ₹ 7.19 crore for the dues of Service Tax for the period from May 2006 to March 2008 on all the seven firms. Against the demand of ₹ 7.19 crore, these seven firms claimed that they had deposited ₹ 2.13 crore on this account to the Service Tax Authorities. Accordingly, the Corporation paid balance Service Tax of ₹ 5.06 crore (₹ 7.19 crore- ₹ 2.13 crore).

The Service Tax Department rejected (2019) claims amounting to ₹ 2.13 crore deposited by the firms on the ground of unavailability of evidence of deposit of the amount by the firms. Later, this matter was settled by payment of ₹ 1.28 crore under Sabka Vishwas Scheme -2019 of the Service Tax Department. The Penalty/Interest was also waived off under the Scheme.

Thus, failure of the Corporation in timely obtaining of Service Tax registration number and recovering Service Tax from the firms resulted in payment of Service Tax of ₹ 6.34 crore out of its own sources.

The Management stated (May 2023) that amount could not be realized from M/s Shivaai Industries (P) Ltd. & M/s International Avenue and matter is sub-judice pending for decision with Hon'ble High Court, Delhi.

- On the request of Delhi Tourism and Transportation Development Corporation (DTTDC), the Corporation provided parking and maintenance facilities for 14 number of HOHO buses in the Corporation Depots from August 2010 to October 2015. However, no agreement in this regard was entered into by the Corporation and DTTDC. In the absence of an agreement, the Corporation could not claim any Parking charges, Electricity charges and Water charges from DTTDC. The Corporation had written off parking charges of ₹ 1.83 crore in 2018-19 whereas Electricity and Water charges amounting to ₹ 9.33 lakh were outstanding (May 2023). The Management accepted (May 2023) the Audit Observation and stated that the matter had been followed up with the DTTDC for recovery of ₹ 9.33 lakh.

Thus, Internal Control mechanism was deficient as there were inefficient Managerial Controls and lack of Accountability which eventually led to losses to the Corporation.

New Delhi **(RAJIV KUMAR PANDEY)**
Dated: 8 November 2024 **Principal Accountant General (Audit), Delhi**

Countersigned

New Delhi **(GIRISH CHANDRA MURMU)**
Dated: 12 November 2024 **Comptroller and Auditor General of India**

Annexures

Annexure 2.1
(Referred to in paragraph 2.2.1 and 2.2.3)
Financial Position of the Corporation during last seven years ended on 31 March 2022

(₹ in crore)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Liabilities							
Total Equity Capital including issued under JNNURM	1983.85	1983.85	1983.85	1983.85	1983.85	1983.85	1983.85
Reserves & Funds	1407.50	1545.48	1718.4	1881.10	2084.76	2694.24	2806.77
Loans from GNCTD	511.30	511.30	511.30	511.30	511.30	511.30	511.30
Ways & Means Loans from GNCTD	11164.84	11164.84	11164.84	11164.84	11164.84	11164.84	11164.84
Grant in aid (water harvesting)	0.02	0.02	0.02	0.02	0.02	0.02	0.02
GIA for construction of bus depots/terminals	18.70	18.33	33.00	43.32	24.88	102.65	88.73
GIA CCTV	0	0	0	0	0	54.29	54.29
Subsidy against Electric Buses	0	0	0	0	0	0	33.30
State Electricity Vehicle Funds	0	0	0	0	0	0	2.88
Interest on Govt. loans	12499.99	16330.59	20818.06	26070.10	32248.27	39424.51	47800.43
Current Liabilities	676.80	861.37	951.16	598.36	636.59	766.63	827.90
Total	**28263.00**	**32415.78**	**37180.63**	**42252.89**	**48654.51**	**56702.33**	**65274.31**
Assets							
Fixed Assets	2272.69	2229.59	2216.91	2206.14	2214.59	2220.01	2195.34
less Depreciation	1163.21	1281.80	1437.27	1576.33	1732.61	1878.58	2012.42
Net Fixed Assets	1109.48	947.79	779.64	629.81	481.98	341.43	182.92
Investment / deposit with bank against reserve funds	3.12	3.28	3.42	3.57	3.72	3.77	3.91
Total current assets, loans & advances	687.32	1039.41	1487.39	1289.71	1535.68	2235.88	2334.03
Accumulated losses	25299.87	29143.50	33472.91	38753.47	44900.52	52242.67	60741.03
Total	**28263.00**	**32415.78**	**37180.63**	**42252.89**	**48654.51**	**56702.33**	**65274.31**
Current Ratio[1]	**1.02**	**1.21**	**1.56**	**2.16**	**2.41**	**2.92**	**2.82**
Net Worth[2]	**-23316.02**	**-27159.65**	**-31489.06**	**-36769.62**	**-42916.67**	**-50258.82**	**-58757.18**
Net worth excluding interest[3]	**-10816.03**	**-10829.06**	**-10671.00**	**-10699.52**	**-10668.40**	**-10834.31**	**-10956.75**

Source: Annual Accounts of the Corporation

[1] Current Ratio = Current Assets divided by Current Liabilities
[2] Net Worth = Paid up capital – accumulated losses
[3] Net worth excluding interest = Paid up capital – accumulated losses (excluding interest)

Annexure 2.2
(Referred to in paragraph 2.2.1 and 2.2.2)
Working results of the Corporation for last seven years ended on 31 March 2022

(₹ in crore)

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Operating Revenue	914.72	839.10	810.12	777.57	792.44	454.42	558.78
Non operating Revenue							
a. Ways & Means Grants (Revenue)	1174.00	1550.00	2007.00	1825.00	2030.00	2475.00	2320.00
b. Non Operating Revenue (excluding Revenue Grants)	90.27	79.60	79.21	106.71	100.30	55.00	101.59
c. Utilisation of grants in aid / any other item (Capital Grants)	4.99	5.74	0.10	19.85	18.45	0.68	0.75
d. Other prior period adjustments etc.	113.87	15.91	62.02	12.84	1.35	9.08	10.25
Total Revenue	2297.85	2490.35	2958.45	2741.97	2942.54	2994.18	2991.37
Net Total Revenue (excluding revenue & Capital Grants) incl other prior period etc.	1118.86	934.61	951.35	897.12	894.09	518.50	670.62
Net Total Revenue (excluding revenue, Capital Grants &other prior etc.)	1004.99	918.70	889.33	884.28	892.74	509.42	660.37
Operating Expenditure							
CNG, Oil & Lubricants and Repair & Maintenance	430.29	398.93	409.43	437.12	455.56	352.33	509.70
AMC Charges -Low Floor Buses	229.29	264.60	280.65	312.41	352.58	356.19	485.34
Total Employee cost	1487.74	1551.14	1837.76	1695.70	1799.73	2174.25	1845.90
Depreciation	168.64	168.98	168.66	167.55	166.48	149.53	134.25
Other Misc operating expenses	82.54	66.22	73.99	79.48	96.03	71.80	85.14
Total Operating Expenditure	2398.50	2449.87	2770.49	2692.26	2870.38	3104.10	3060.33
Non operating Expenditure							
Interest on GNCTD loans	3277.14	3830.59	4487.48	5252.03	6144.55	7176.23	8375.92
Others (Interest on equity capital and plan loan re-appropriated to capital reserve and other misc.	33.31	53.51	29.90	78.23	74.66	56.00	53.47
Total Non operating expenditure	3310.45	3884.10	4517.38	5330.26	6219.21	7232.23	8429.39
Total expenditure	5708.95	6333.97	7287.87	8022.52	9089.59	10336.33	11489.72
Operating loss for the year	**1483.78**	**1610.77**	**1960.37**	**1914.69**	**2077.94**	**2649.68**	**2501.55**
Total Loss for the year	**3411.10**	**3843.62**	**4329.42**	**5280.55**	**6147.05**	**7342.15**	**8498.35**
Effective KMs operated (in crore)	**26.73**	**25.79**	**23.73**	**23.40**	**22.72**	**18.99**	**23.55**
Operating Revenue per km (₹)	34.22	32.54	34.15	33.23	34.88	23.93	23.73
Non operating Revenue per km (₹) excluding Revenue Grant (RG)	3.38	3.09	3.34	4.56	4.40	2.90	4.31
Revenue Grants per km (₹)	43.92	60.11	84.59	77.99	89.34	130.34	98.52

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Utilisation of grants (Capital Grants), Other prior period adjustments etc.	4.45	0.84	2.62	1.40	0.87	0.51	0.46
Total Revenue per km (₹)	85.97	96.58	124.70	117.18	129.49	157.68	127.02
Net Total Revenue (excluding revenue & Capital Grants) incl other prior period adjustment etc.	41.86	36.24	40.10	38.34	39.34	27.31	28.47
Net Total Revenue (excluding revenue, Capital Grants & other prior etc)	37.60	35.63	37.48	37.79	39.28	26.83	28.04
Operating Expenditure per km (₹)	89.73	95.00	116.77	115.05	126.33	163.47	129.96
Non operating Expenditure per km (₹)	123.85	150.62	190.40	227.78	273.71	380.87	357.98
Non operating expenditure without interest per km (₹)	1.25	2.08	1.26	3.34	3.29	2.95	2.27
Operating Loss for the year per km (₹)	55.51	62.46	82.63	81.82	91.45	139.54	106.23
Total Expenditure per km	213.58	245.63	307.17	342.83	400.04	544.34	487.94
Total Profit (Loss) per km (₹)	**-127.61**	**-149.05**	**-182.48**	**-225.65**	**-270.55**	**-386.66**	**-360.91**

Source: Annual accounts and operational statistics of the Corporation

Annexure 3.1
(Referred to in paragraph 3.1)
Operational performance of the Corporation for the period of seven years ended on 31 March 2022

Sl. No.	Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Buses held at the end of the Year	4344	4020	3944	3842	3762	3760	3762
2	Average number of buses held	4557	4160	3963	3887	3789	3761	3760
3	Average number of buses on road	3817	3547	3402	3295	3222	2894	3206
4	Percentage of utilization of buses {(3÷2)×100}	83.76	85.26	85.84	84.77	85.04	76.95	85.27
5	Number of employees	26291	24194	25450	24696	28078	28671	30591
6	Employee vehicle ratio (5÷2)	5.77	5.82	6.42	6.35	7.41	7.62	8.14
7	Number of routes operated during the year	557	483	461	445	455	460	468
8	Average number of trips scheduled daily	39232	36115	35212	34167	32913	26795	33547
9	Average number of trips operated daily	33497	33101	31341	30562	29832	24582	31834
10	Operational ratio (Percentage) {(9÷8)×100}	85.38	91.65	89.01	89.45	90.64	91.74	94.89
11	Scheduled kilometers (in lakh)	3205.36	2882.64	2766.45	2694.18	2566.64	2095.38	2533.52
12	Effective kilometers operated (in lakh)	2673.50	2578.71	2372.56	2340.11	2272.17	1898.88	2354.74
13	Dead kilometers (in lakh)	29.06	17.79	13.71	7.24	3.75	2.77	3.1
14	Gross kilometers operated (in lakh) (12+13)	2702.56	2596.5	2386.27	2347.35	2275.92	1901.65	2357.84
15	Percentage of dead kilometers to gross kilometers {(13÷14)×100}	1.08	0.69	0.57	0.31	0.16	0.15	0.13
16	Missed kilometers (in lakh) (11-12)	531.86	303.93	393.89	354.07	294.47	196.50	178.78
17	Percentage of missed kilometers to scheduled kilometers {(16÷11)×100}	16.59	10.54	14.24	13.14	11.47	9.38	7.06
18	Vehicle utilization kilometers/bus/day (12÷ average number of vehicles on road ÷ number of days in the year)	191	199	191	195	193	180	201
19	Population of Delhi (in lakh)	267.20	276.02	285.14	293.99	302.91	311.81	320.66
20	Average number of buses on road per one lakh population (3÷19)	14.29	12.85	11.93	11.21	10.64	9.28	10
21	Total passengers carried (in lakh per year)	12944.24	11516.52	10897.91	11004.48	12182.40	4468.05	5702.20
22	Load factor (*per cent*)	82.00	81.36	83.83	81.34	86.77	69.50	64.94
23	Breakdowns per 10,000 kilometers	4.50	3.83	4.08	3.96	4.57	2.90	4.01
24	Accidents per one lakh kilometers	0.06	0.05	0.05	0.05	0.05	0.04	0.04

Annexure 3.2
(Referred to in paragraph 3.2.1 and 3.2.2)
Age- profile of the buses held by the Corporation for the last eight years ended on 31 March 2023

Sl. No.	Particulars		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
1	Total No. of buses at the beginning of the year	Standard	924	563	239	163	61	**0**	**0**	**0**
		Low Floor AC	1275	1275	1275	1275	1275	1257	1256	1256
		Low Floor Non AC	2506	2506	2506	2506	2506	2505	2504	2504
		Electric Buses	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
		Grand Total	**4705**	**4344**	**4020**	**3944**	**3842**	**3762**	**3760**	**3762**
2	Addition during the year[4]	Standard	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		Low Floor AC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		Low Floor Non AC	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		Electric Buses	**0**	**0**	**0**	**0**	**0**	**0**	2	298
		Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**298**
3	Scrapped during the year	Standard	361	324	76	102	61	**0**	**0**	0
		Low Floor AC	**0**	**0**	**0**	**0**	18	1	**0**	0
		Low Floor Non AC	**0**	**0**	**0**	**0**	1	1	**0**	123
		Electric Buses	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
		Grand Total	**361**	**324**	**76**	**102**	**80**	**2**	**--**	**123**
4	Buses at the end of the year	Standard	563	239	163	61	--	--	--	0
		Low Floor AC	1275	1275	1275	1275	1257	1256	1256	1256
		Low Floor Non AC	2506	2506	2506	2506	2505	2504	2504	2381
		Electric Buses							2	300
		Grand Total	**4344**	**4020**	**3944**	**3842**	**3762**	**3760**	**3762**	**3937**
5	No. of buses more than eight years old (standard buses)/ more than 12 years old (Low floor buses)	Standard	563	239	163	61	--	--	--	--
		Low Floor AC	--	--	--	--	--	--	25	274
		Low Floor Non AC	--	--	--	5	6	165	631	1496
		Electric Buses								
		Grand Total	**563**	**239**	**163**	**66**	**6**	**165**	**656**	**1770**
6	Percentage of overage buses to total buses (in %age)	Standard	100	100	100	100	NA	NA	NA	NA
		Low Floor AC	NA	NA	NA	NA	NA	NA	2.00	21.82
		Low Floor Non AC	NA	NA	NA	0.20	0.24	6.59	25.20	62.83
		Electric Buses								
		Grand Total	**12.96**	**5.95**	**4.13**	**1.72**	**0.16**	**4.39**	**17.44**	**44.96**
7	Percentage of overaged buses to total buses in other State Transport Undertakings (as per data of ASRTU)[5]	Andhra Pradesh State Road Transport Corporation (APSRTC)	1	1.04	1.23	1.23	NA	NA	NA	NA
		Brihanmumbai Electric Supply & Transport (BEST)	0	0	0	0	NA	NA	NA	NA

Source: Corporation data and data received from Association of State Road Transport Undertakings (ASRTU)

4 Two Electric Buses were procured in March 2022, hence, not included in Age Profile.
5 Information available only for four years from 2015-16 to 2018-19.

Annexure 3.3
(Referred to in paragraph 3.2.3)
Statement showing Vehicle productivity of the Corporation, MTC, BMTC and Cluster buses

Sl No.	Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	**Targets per bus (in km per day)**	**189**	**198**	**193**	**192**	**200**	**194**	**NA**
2	**Standard Buses**	160	173	159	155	NA	NA	NA
3	**AC Low Floor Buses**	192	197	188	194	198	197	210
4	**Non-AC Low Floor Buses**	199	203	194	196	190	172	197
5	**Electric Buses**	0	0	0	0	0	0	0
6	**Total (weighted average)**	191	199	191	195	193	180	201
7	**Less km run per bus per day (1-6)**	NA	NA	2	NA	7	14	NA
8	**Average no. of buses on road during the year**	NA	NA	3402	NA	3222	2894	NA
9	**Number of days in the year**	NA	NA	365	NA	366	365	NA
10	**Traffic income per km (in paisa)**	NA	NA	3126	NA	3237	2294	NA
11	**Loss of revenue (7*8*9*10) (₹ in crore)**	NA	NA	7.76	NA	26.72	33.92	NA
12	**All India vehicle productivity as per CIRT**	344	348	345	343	NA	NA	NA
13	**Vehicle productivity of MTC(Chennai), Ltd**	NA	NA	NA	287	279	252	253
14	**Vehicle productivity of BMTC**	208.50	206.50	203.80	202.60	200.40	NA	NA
15	**Vehicle productivity of Cluster buses**	215	210	204	211	202	214	217

Source: Corporation data, CIRT Pune publication, Annual report of MTC (Chennai) and BMTC.

Annexure 3.4
(Referred to in paragraph 3.2.4)
Statement showing Load factor of the Corporation and Cluster buses

Sl No.	Particulars		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	City Operation	SF	63.07	49.03	38.99	37.93	38.52	NA	NA
		LF	87.69	86.88	86.47	82.71	87.21	81.84	76.73
		AC LF	85.76	82.14	85.11	82.53	89.62	40.00	42.14
2	NCR Operation	SF	45.97	45.10	47.74	15.16	NA	NA	NA
		LF	57.11	55.54	60.91	58.31	58.24	36.71	NA
		AC LF	46.20	51.08	59.01	57.58	52.08	28.55	NA
	Total		**82.00**	**81.36**	**83.83**	**81.34**	**86.77**	**69.50**	**64.94**
	Cluster buses		79.57	78.64	85.21	88.19	89.45	67.26	78.00

Source: Corporation data

Annexure 3.5
(Referred to in paragraph 3.2.6)
Statement showing the missed Scheduled kms

Sl. No.	Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Traffic Income per Km (in paisa)	3121	3058	3126	3032	3237	2294	2228
2	Variable Cost (per KM in paisa)							
	HSD and Petrol	46	101	263	8	6.22	4.14	2.42
	CNG	1504	1469	1677	1787	1950.21	1893.47	2021.74
	Lubricants	16	5	3	1	0.02	0	0.23
	Tyres, tubes and Flaps	6	0	1	0	0.09	2.76	0.10
	Re-treading Material	4	1	0	0	0	0	0
	Stores and Spare Parts	28	12	3	4	1.27	0	1.08
	Tickets	9	8	17	16	17.89	46.84	5.86
	Total Variable Cost	**1613**	**1596**	**1964**	**1816**	**1975.7**	**1947.21**	**2031.43**
3	Contribution per Km (in paisa)	1508	1462	1162	1216	1261.3	346.79	196.57
4	**Missed Scheduled KMs on account of Controllable reasons (in lakh KMs)**	**369.86 (69.54%)**	**191.85 (63.12%)**	**225.62 (57.28%)**	**209.02 (57.62%)**	**158.08 (53.68%)**	**107.5 (54.71%)**	**77.93 (43.59%)**
5	**Loss of revenue due to Controllable reasons (₹ in crore)(1*4)**	**115.43**	**58.67**	**70.53**	**61.86**	**51.17**	**24.66**	**17.36**
6	**Missed scheduled kms due to reasons not identifiable by DTC (in lakh KMs)**	**160.52 (30.18%)**	**111.39 (36.64%)**	**168.02 (42.65%)**	**149.84 (42.32%)**	**136.17 (46.24%)**	**88.69 (45.13%)**	**100.46 (56.19%)**
7	**Loss of revenue due to reasons not identifiable by DTC(₹ in crore) (1*6)**	**50.10**	**34.06**	**52.52**	**45.43**	**44.08**	**20.35**	**22.38**

Annexure 3.6
(Referred to in paragraph 3.2.8)
Statement showing actual consumption of CNG, mileage obtained per kilogram of CNG and extra expenditure on CNG consumption

Sl. No.	Particulars	Bus Type	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Total gross KMs operated (in lakh KMs)	AC	741.27	764.30	740.15	756.34	775.10	670.69	835.95
		Non-AC	1946.53	1816.56	1631.54	1576.57	1501.64	1249.83	1488.77
2.	Actual consumption of CNG (in lakh Kgs)	AC	384.46	397.03	392.38	388.47	406.70	321.19	415.71
		Non-AC	805.72	755.68	695.11	669.18	659.79	516.34	638.78
3.	Mileage obtained per Kg	AC	1.93	1.93	1.89	1.95	1.91	2.09	2.01
		Non-AC	2.42	2.40	2.35	2.36	2.28	2.42	2.33
4.	Mileage as per norm (in Kg)(Less than 8 years)	AC	2.23	2.23	2.23	2.23	2.23	2.23	2.23
		Non-AC	2.47	2.47	2.47	2.47	2.47	2.47	2.47
	Mileage as per norm (in Kg) (More than 8 years)	AC	2.19	2.19	2.19	2.19	2.19	2.19	2.19
		Non-AC	2.42	2.42	2.42	2.42	2.42	2.42	2.42
5.	CNG that would have been consumed as per Norm (in lakh Kgs)	AC	332.41	342.74	332.03	340.58	353.80	306.25	381.71
		Non-AC	788.11	736.45	663.98	646.81	620.48	516.46	615.20
6.	Excess CNG consumed (in Kg) (2-5) (in lakh Kgs)	AC	52.05	54.29	60.35	47.90	52.90	14.94	33.99
		Non-AC	17.61	19.23	31.13	22.38	39.31	-0.12	23.59
		Total	69.66	73.52	91.49	70.27	92.21	14.82	57.58
7.	Avg CNG Price (in ₹)		36.24	35.45	37.51	41.63	44.14	41.50	46.30
8.	**Loss (₹ in lakh)**		**2524.36**	**2606.35**	**3431.69**	**2925.43**	**4070.15**	**615.04**	**2665.93**

Source: Corporation data

Annexure 4.1
(Referred to in paragraph 4.1)
Statement showing proposals made for procurement of buses since 2013 but could not be finalised to tender stage

Particulars	**1380 Non-AC buses (without AMC)**	**500 Non-AC buses without AMC**	**345 AC Premium Segment**	**1100 (600 Non-AC LF CNG buses 400 mm and 500 Non-AC CNG midi buses 650 mm)**	**1000 AC LF CNG**	**1000 Non ACLF CNG with AMC**	**500 LFB (400 Non-AC & 100 AC) without AMC**	**1000AC CNG low Floor buses, without AMC**	**1015 Electric buses and 230 CNG buses**
Cabinet Approval	2086 dated 3.10.13	-	2086 dated 3.10.13	-	-	-	-	2579 dated 18.5.18	-
Board approval date	28.5.15	28.5.15	29.7.15	30.11.15	4.2.16	17.2.16	25.6.18	5.3.19	1.10.21
Bus type/Floor height	Semi LF buses(650 mm) Non AC	CNG Midi buses (650 mm), Non AC, without AMC	Premium Segment 400 mm Floor height, AC, with AMC	Low Floor Non-AC CNG buses (400 mm) 650 mm Floor Non-AC CNG midi buses	Low Floor	Low Floor CNG	Low Floor, Non-AC	Low Floor CNG, 500 AC & 500 Non-AC	Electric & CNG
Consultant	Tender called (19.6.15)	DIMTS	CIRT, Pune	DIMTS				DIMTS	DIMTS
Estimated cost (₹ in crore)	552	125	338		780	650	410	850	
Outcome / Decision	Proposal could not be finalized by Government and decision changed to procure 1000AC 400 mm floor height bus		-	Formal approval of GNCTD not conveyed to DTC	Proposal foreclosed to procure 1000 LF Non-AC CNG buses	Formal approval of GNCTD not conveyed to DTC		Cabinet in the approval dt. 11.7.19, changed specification to all 1000 buses to be ACLFB	No response received from transport department in this regard.

Annexure 5.1
(Referred to in paragraph 5.3)
Statement showing Manpower position during the seven years period ended on 31 March 2022

(Figures in numbers)

Category	Staff	Year						
		2015-16	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**
Existing fleet strength (Nos)		4344	4020	3944	3842	3762	3760	3762
Drivers	Sanctioned	10860	10617	10407	9949	10239	9904	9925
	On roll	11499	10582	10023	9891	9617	9671	10710
	Excess/ Short (-)	639	-35	-384	-58	-622	-233	785
Conductors	Sanctioned	10860	10617	10442	9949	12736	13380	14077
	On roll	12370	11348	10656	10642	15440	15289	17221
	Excess/ Short (-)	1510	731	214	693	2704	1909	3144
Traffic Supervisors	Sanctioned	2172	2010	1972	1878	2191	2290	2315
	On roll	1260	1237	793	873	469	954	731
	Excess/ Short (-)	-912	-773	-1179	-1005	-1722	-1336	-1584
Repair and Maintenance	Sanctioned	Records not available		2456	2337	2153	2153	2143
	On roll			3052	2476	1855	2083	1395
	Excess/ Short (-)			596	139	-298	-70	-748
Adminis-tration and Ministerial staff	Sanctioned	2616	2616	2616	2616	2616	2616	2616
	On roll	1162	1027	926	814	697	674	534
	Excess/ Short (-)	-1454	-1589	-1690	-1802	-1919	-1942	-2082

https://cag.gov.in/ag/new-delhi/en